

INDIAN ECONOMICS

*Being a Comprehensive and Critical Survey of the
Economic Problems of India*

VOL. I

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PREFACE

Books on Indian Economics are falling as thick as autumnal
leaves in Vallambrosa. But among them the number of those
which are sufficiently comprehensive and otherwise satisfactory
is counted on the fingers of one hand. In a sense there is
no room for a new book on Indian Economics, if for no
other reason at least because facts and figures get rapidly
outdated and it is necessary to bring them up to date. But in
writing the present book we have been inspired by a somewhat
higher ambition than this. Apart from the purely descriptive
narration of Indian Economics, the critical matter is generally of
poor quality and its treatment often suffers from an inability to
analyse a process of thought and follow it out to its logical con-
clusion. The complaint that there is usually an absence of any
proper correlation of the subject with economic theory is as a
rule well grounded. Also, there is too often a lack of consistency
and the standpoint adopted varies from chapter to chapter. There is
further a tendency to shift the discussion from the economic to the
political, moral or spiritual plane in a manner which gives
rise to the suspicion that this is done in order to save the book
from being too technical. Much too frequently, catchwords like
"economic theory" are utilised as supplying easy and ready-made
answers to a very difficult problem. We have tried to
avoid these effects and hope to have succeeded.
We have been at some pains to
bring economic theory, we have
presented economic principles as
they stand at present in a book
on the subject of Indian Economics.

are often included mainly as padding complements. We approached controversial questions with absolute impartiality, moderation and have endeavoured to maintain the necessary "objectivity of vision and evenness of temper." We have tried to remember that there is no higher duty than truth, "which is the justly proportioned expression of fact without exaggeration or extenuation." We have aimed at being accurate rather than exciting, useful rather than polemical.

Although the book is primarily intended for the Honours students reading for the B. A. and M. A. Degrees in Economics in the different Universities in India, we hope that it will be found not unworthy of the attention of teachers and economic experts. We also venture to think that the work will be found useful by publicists and legislators. It offers a main line of orientation to those who wish to become acquainted with the principal economic and politico-economic problems before the country, problems which directly affect the prosperity and ought to engage the attention of every responsible citizen.

The fundamental problem of writing a comprehensive treatise on Indian Economics is that of selection from an enormous mass of material, which, moreover, is scattered through a colossal literature, much of which is fugitive in character.

To condense it without rendering it indigestible

we have, however, not been able to stick to

compressing the treatment within

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We have, therefore, decided

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would not permit our

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ady published and hope to be able to deal with the Report itself in our second volume. It will be noticed that we have treated more fully than usual agricultural and rural problems which hitherto have tended to be neglected, far too much attention being generally given to such problems as Currency, Exchange, Finance etc. We consider the space we have allotted to agriculture and allied topics abundantly justified in view of their importance and the growing public interest in them.

We are only too conscious of the many imperfections of the book. We can think of several distinguished economists in India who are capable of writing a book of much greater merit. We refrain from mentioning their names as we wish to spare their blushes. However, if the present work impels any of them to essay the easy task of excelling it we shall be genuinely satisfied.

In conclusion, we have great pleasure in expressing our indebtedness to the Secretary of the Shri Ganesh Printing Works, Poona, for the great despatch with which he has managed to put the book through the press. If it had not been for the many facilities freely and obligingly given to us by the Press the publication of the book would have been very considerably delayed.

Poona,
15th June 1928.

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	Pages
principal crops in India.—Export of agricultural products. 8 Restrictions on the export of food stuffs. 9 Restrictions on the export of raw materials. 10 Low yield and its causes. 11 Is the soil progressively deteriorating in India?	
CHAPTER VII. Agriculture (continued), Land.	231-271
I. Subdivision and Fragmentation of Holdings.	
1 The idea of an optimum holding. 2 Unit of cultivation and unit of ownership. 3 Evils of subdivision and fragmentation. 4 Case for fragmentation and subdivision. 5 Extent of evil in India. 6 Causes of subdivision and fragmentation. 7 The problem in foreign countries. 8 What is an Economic Holding? 9 Remedial measures. 10 The Bombay Small Holdings Bill, 1927. 11 Controversy regarding the Bill.	
II. Permanent Improvements.	
12 Absence of permanent improvements and its consequences.	
III. Irrigation.	
13 (i) Necessity and importance. (ii) Advantages of irrigation. (iii) Classification of irrigation works. (iv) Extent, growth and revenue. (v) Irrigation policy of Government. (vi) Irrigation versus Railways.	
CHAPTER VIII. Agriculture (continued) Labour, equipment and organization.	272-307
Labour	
1 The human factor. 2 A comprehensive scheme of rural education. 3 Physical inefficiency of the peasant: its causes and cure. 4 Need for closer contact between village and town. 5 Methods of propaganda work. 6 Hired agricultural labour. 7 Landlord and his place in rural economy.	

8 The duties and responsibilities attaching to land-ownership.

Technique and Equipment.

9 Technique : methods of cultivation. 10 Manure. 11 Implements. 12 Live Stock. 13 Problem of fodder supply. 14 Cattle breeding. 15 Veterinary Department. 16 Reserve capital

Organisation.

17 Importance of rural industries. 18 Dairy-keeping. 19 Economics of *Khaddar*. 20 Some other rural industries. 21 Marketing : co-operative sale. 22 Other improvements in the marketing organisation.

CHAPTER IX. Agriculture (Continued) :—Rural Indebtedness.

308-327

1 Rural indebtedness a serious problem. 2 Extent of indebtedness. 3 Causes of indebtedness. 4 State policy regarding rural indebtedness. 5 Measures to avoid unnecessary debts. 6 Measures for the improvement of the Civil Law. 7 Restrictions on the transfer of land. 8 The supply of money and credit. 9 Co-operative credit.

CHAPTER X. Agriculture (continued), The Co-operative movement in India.

328-386

1 Meaning of Co-operation. 2 Co-operation in other lands. 3 Co-operation and its uses in India. 4 Act of 1904. 5 Review of progress from 1904 to 1912. 6 The Co-operative Societies Act of 1912. 7 Progress of the Movement subsequent to the Act of 1912. 8 Classification of Co-operative Societies. 9 Primary Agricultural Credit Societies. 10 The chief recommendations of the MacLagan Committee. 11 Non-agricultural Credit Societies. 12 The non-Credit Co-operative Movement : Some general ques-

tions. 13 Non-credit Agricultural Movement. 14 Non-credit non-agricultural societies. 15 Housing societies. 16 Central Societies and Co-operative Finance. 17 The State in relation to the Co-operative Movement. 18 A critical estimate of the Co-operative Movement in India. 19 The need for Land Mortgage Banks. 20 Land Mortgage Banks and Co-operation. 21 History of Land Mortgage Banks in India. 22 Example of Germany. 23 State help for Land Mortgage Banks. 24 The Madras and Bombay Schemes.

CHAPTER XI. Agriculture (Continued) : The State in relation to Agriculture. 387—398

1 The need for State aid. 2 The evolution of the Agricultural Departments. 3 Other items of State aid. 4 Royal Commission on Agriculture.

CHAPTER XII. Agriculture (Continued) : Land Tenures. 399—463

1. Historical survey of Land Revenue in India. 2. Three kinds of Land Tenure. 3 Two main forms of village constitution. 4 Constitution and types of joint or landlord villages. 5 Landlord estates including more than one village estate. 6 Subproprietary and Tenant rights. 7 Other than occupancy tenants. 8 General features of occupancy privilege. 9 Tenancy in Rayatwari Provinces. 10. Land Revenue Settlements. 11 Classification of Settlements. 12 Zamindari Settlements : Permanent Settlement in Bengal. 13 Criticism of the Zamindari Settlement of 1793 in Bengal. 14 Permanent Settlement of Madras. 15 Subsequent History of Permanent Settlement. 16 Temporary Settlement with the remaining Zamindars of Bengal and Talukdars of Oudh. 17 Mahalwari Settlements. 18 Principles of assessments in Mahalwari systems. 19 Mahalwari Settlement operations. 20 Mahalwari Settle-

ment of the Punjab. 21 The Malguzari Settlement of the Central Provinces. 22 Rayatwari Settlements: The Rayatwari System of Madras. 23 The Rayatwari system of Bombay. 24 Main features of Settlement of Bombay. 25 Special systems (in principle Rayatwari) of Burma and Assam. 26 State Ownership vs. Individual Ownership. 27 Land Revenue: Tax or Rent? 28 Permanent vs. Temporary Settlement. 29 Term of Settlement. 30 Principles of assessment. 31 Ricardian Theory in relation to Land Revenue in India. 32 A new basis of assessment. 33 Rate of assessment: a recommendation. 34 What should be the limits of enhancement? 35 Application of principles of taxation to Land Revenue. 36 Principle of Formal Justice. 37 Legislative control.

CHAPTER XIII. Industries.

464—497

- 1 Industrial history of India during recent times.
 - 2 Survey of the policy of the state in relation to industrial development.
 - 3 Industrial development during the War.
 - 4 The Indian Munitions Board.
 - 5 Introduction of protective tariffs.
 - 6 Industrial backwardness of India.
 - 7 Potentialities.
 - 8 Benefits of industrial development.
 - 9 Reactions of Industry on Agriculture.
 - 10 Capital for industries: Indigenous capital.
 - 11 External capital in India.
 - 12 Amount of foreign capital.
 - 13 Foreign capital in India: main issues.
 - 14 Objections to foreign capital.
 - 15 Uses and advantages of foreign capital.
 - 16 Proposed restrictions on external Capital.
 - 17 Manner of imposing restrictions.
 - 18 Need for developing internal capital resources.
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CHAPTER I

INDIAN ECONOMICS : SCOPE AND DEFINITION.

1. **Definition:**—Indian Economics, as generally understood, may briefly, simply and sufficiently be described as a study of the principal economic problems in India with an analysis of their probable causes and of any measures that have been or might be taken to deal with them. An examination of the economic position of the country will naturally lead to a criticism or appreciation of public policy in India and to the formulation of schemes for effecting improvements in the economic condition of the country. The point of view throughout will be national, the object aimed at being, first and last, the material advancement of the Indian people. It is not altogether superfluous to insist on this because the danger of its being ignored or forgotten is not purely imaginary. For example, Sir John Strachey in presenting his Financial Statement in 1877, repudiated the doctrine that it was the duty of the Government of India to think of Indian interests alone and confessed to the sentiment that there was no higher duty in his estimation than the duty which he owed to his own country. This is really an echo of the old colonial policy which regarded the overseas possessions of England as primarily intended to serve English interests. We can obviously have nothing to do with this view of the matter. Nor can we consent to any sacrifice for the greater glory of the Empire, of which we are a part, unless we are convinced that the sacrifice asked for is ultimately to the national advantage. As a general rule, we must put our country first without hesitation and our wider and less immediate loyalty to the Empire, second. This has also been the attitude of the self-governing colonies who have primarily sought to advance their own national interests; and their love for the mother country, the Empire or the world as a whole has always been tempered by their determination to raise themselves to the highest possible pitch of material prosperity. And it is a matter of common knowledge that in the pursuit of this object they have sometimes adopted measures, for instance, in connection with their

tariff arrangements, resulting in immediate injury to the mother-country. This still remains a substantially correct description of the attitude of the colonies, in spite of the fact that the experiences of the War have somewhat weakened the spirit of jealous national individualism in economic matters and increased the willingness on the part of the constituent members to undergo some sacrifice, if necessary, in order to knit the Empire closer together. India also desires similar freedom to regulate her economy principally in her own interests, without necessarily denying the interrelation between national economy on the one hand, and imperial or world economy on the other.

*To sum up, then, Indian Economics is a study of the present economic position of India from the Indian national point of view.**

§ 2. A second possible meaning:—The sense in which, following common usage, we propose to employ the term Indian Economics is perfectly natural and otherwise justifiable and in justification of one particular use of a term it is really not necessary to prove that it is incapable of bearing other meanings as well. As a matter of fact, the term Indian Economics is capable of yielding at least two other meanings.† In the first place, it may mean the history of Indian economic thought from the earliest times to the present day. Possibly such a history may make rather uninteresting reading if, as is alleged, there is no continuous development of thought to trace—no movement of thought to record—and if the ideas held in one century are more or less the ideas held in the succeeding centuries, until we reach quite recent times when we have to reckon with Western influences. It is also likely that, such a

* In attaching this meaning to the term Indian Economics, it does not seem to us that any violence is being done to the English language; and moreover, we have the sanction of a long-established usage to plead in justification of this interpretation. The late Principal Percy Anstey thought that the term "Indian Economics" was as "uncouth and infelicitous" as it was "misleading." We suspect that this criticism is widely quoted more for its highly felicitous arrangement of adjectives than its inherent justice. As to the term being uncouth and infelicitous, this is purely a matter of taste. As to its being misleading, when we have precisely defined our term, there is no reason why it should mislead anybody.

† See Kale: *Indian Economics* 5th edition, vol I, Introduction. pp. 1-2.

history will be discontinuous in the sense that it will have to be frequently punctuated by admissions of ignorance. For, as things stand at present, we know next to nothing about the prevalent conditions of many periods of our past history, though the progress of research may succeed, in course of time, in illuminating much that is now enveloped in deep obscurity. *These objections, however, are by no means fatal to the use of the term Indian Economics in the sense of a History of Indian Economic Thought (though confusion may be easily avoided by making use of the fuller term when this sense is to be conveyed).*

§ 3. A third interpretation :—We have similarly to concede that, so far as it is merely a question of language, *Indian Economics may also quite legitimately mean a novel system of economic doctrines*, different as they would be from those current in the West, if it is true that Indian society and conditions are so fundamentally opposed to Western society and conditions that the usual basic assumptions of Political Economy are entirely inapplicable in this country. However, as there is no such thing as “an altogether new science of economics” created “out of Indian materials,” *the term Indian Economics will never actually be required for this particular use.* Indian human nature is essentially the same as human nature in the West and the fundamental presuppositions on which the science of Political Economy is based hold good in India as elsewhere. It is not as if, whereas in the West the motive of self-interest is sufficiently strong and continuous in operation to serve as a basis for the science of Economics, we should have to assume in India that people are normally moved by the altruistic and not the economic motive. Similarly, with regard to the other assumptions, such as that of free competition, mobility of labour and capital etc., although perhaps they cannot be made with the same confidence with reference to Indian conditions as in the West, they are nevertheless sufficiently valid to make the general principles of Economics, as elaborated by Western thinkers, of great value in understanding the economic situation in India, and Western experience in the domain of practical economics is full of valuable lessons for India to learn.

* “The chief impulses which lead to the production, consumption, exchange and distribution of wealth are the same in all countries.” Brij Narain : *Essays on Indian Economic Problems*, Part 1, P. 16.

Since human nature everywhere is the same and the science of Economics is based upon certain universal characteristics of human nature there can, indeed, be only one Economics as there is only one Mathematics, one Physics, one Chemistry etc. If a student therefore, who is acquainted with Western economic theory takes up a book on Indian Economics in the hope of discovering an altogether new set of economic theories he will be disappointed. At the most, he will get up from the perusal of the book with a fuller realisation of "the unity of the substance of Economics under varying forms" (Marshall) and also with his sense of the relativity of economic doctrines wholesomely strengthened.

§ 4. Indian Economics : a separate subject of study —But the admission that there is only one science of Economics does not preclude us from holding that *a separate study of the economic conditions in every country is not only justifiable but indispensable.** It is quite clear that in the absence of such a study economic policy is likely to be mistaken and detrimental to the true interests of the country.

§ 5. Indian Economics not merely an exposition of economic principles with Indian illustrations;—Text-books on Indian Economics often treat the different problems under the usual headings of Land, Labour, Capital, Production, Distribution, Exchange etc. This has the advantage of making the treatment appear systematic and methodical and ensuring the inclusion of all the important topics. Such an order of treatment, however, should not lead us to imagine that Indian Economics is merely an exposition of economic principles with facts of Indian

* "Indian Economics, a separate subject for study"—so runs the first item in the revised curriculum for the B. A. Honours Economics in the Bombay University. This is either a platitude or it is misleading. It is true only in the obvious sense explained above. However, since the matter has been regarded as worthy of explicit statement, the misleading suggestion seems to be intended that the study of economic conditions in India somehow stands on an altogether different footing from a similar study in other countries. Our discussion of the meaning to be attached to the term "Indian Economics" may appear to some as needlessly elaborate. But we have thought it advisable to try, even at the risk of appearing to labour the obvious, to remove the accretions of confused thinking and misleading suggestion with which the question is overlaid.

economic life thrown in merely by way of illustrating theory. *Economic theory with Indian illustrations* would no doubt be more easily assimilated by the Indian student than if the illustrations were drawn from unfamiliar conditions. This, however, has no title; be called *Indian Economics*, which is a realistic study wholly concerned with the facts and problems of Indian economic life, reference to economic theory proper being relevant only in so far as it helps the understanding of these facts and problems.

Such a separate study with reference to India, we call Indian Economics, as we may well call a similar study of English conditions by the name of English Economics. In England, there may not be a plethora of single or double-volume comprehensive text-books on English Economics, but the subject is treated in numerous separate treatises dealing with the different aspects of English economic life, such as Banking, Currency, Transport, Agriculture etc., and we may say with perfect appropriateness that these treatises collectively constitute English Economics.

§ 6. *Ranade's valuable work* :—During the greater part of the 19th century, Government policy in this country was unduly doctrinaire and professed to be guided by universal principles of Political Economy as expounded in popular English text-books forgetting the hypothetical character of the Laws of Political Economy. Because free trade was good for England, it was urged that it must be good for India also. Because *Laissez-Faire* was on the whole best suited to English conditions, it was argued that it must be equally beneficial to India in spite of the fact that in India the spirit of private enterprise was practically non-existent or very feebly developed. The appeal by Government to the conclusions of economic theory was sometimes honest and at other times disingenuous. And in the judgment of many thinking people Government policy in economic matters did not serve the true interests of India. It was attacked by politicians who roundly accused Government of sacrificing Indian national interests for promoting imperial or British interests and it was also attacked by economists the foremost among whom was the late Mr. Justice Ranade. Ranade pressed the attack from the economic point of view with his accustomed erudition and in words unmatched, at least by any other Indian writer, in respect

of vigour and brilliance. *He set himself the task of proving that many of the assumptions at the back of all dogmatical treatment of the subject of Political Economy were inapplicable to India and that public policy if it was really to further the economic development of the country could not afford to ignore the major peculiarities exhibited by Indian conditions.* In the following oft quoted passage he points out what he considers the important distinguishing characteristics alleged to have been disregarded by Government—"As these assumptions (Ranade is referring to assumptions such as enlightened individualism, free competition, mobility of labour and capital etc.) do not absolutely hold good of even the most advanced Societies, it is obvious that in Societies like ours, they are chiefly conspicuous by their absence. With us an average individual man is, to a large extent, the very antipodes of the Economical man. The Family and the Caste are more powerful than the Individual in determining his position in life. Self-interest in the shape of the desire of Wealth is not absent, but it is not the only nor the principal motor. The Pursuit of Wealth is not the only ideal aimed at. There is neither the desire nor the aptitude for free and unlimited Competition except within certain predetermined grooves or groups. Custom and State regulation are far more powerful than competition, and Status more decisive in its influence than Contract. Neither capital nor labour is mobile, and enterprising and intelligent enough to shift from place to place. Wages and profits are fixed and not elastic and responsive to change of circumstances. Population follows its own Law, being cut down by disease and Famine, while production is almost stationary, the bumper harvest of one year being needed to provide against the uncertainties of alternate bad seasons. In a Society so constituted, the tendencies assumed as axiomatic, are not only inoperative, but are actually deflected from their proper direction. You might as well talk of the tendency of mountains to be washed away into the sea, or of the valleys to fill up, or of the Sun to get cold, as reasons for our practical conduct within a measurable distance of time."*

§ 7. Ranade's responsibility for an error:—In uttering his energetic protest against the blind imitation in India of

* Ranade : *Essays on Indian Economics*, pp 9-10. The capital letters belong to the original. Ranade revelled in them and had an almost Teutonic partiality for them.

the economic policy found suitable in the entirely different environment of 19th century England, Ranade did a great service to his country. But contemplating his words at this distance of time, it must be admitted that he *was partly responsible for giving currency to the notion that Western economic theory was utterly useless for interpreting economic phenomena in India and indicating methods of economic progress.* So far as Ranade himself was concerned, it may be urged that an overstatement of the case was necessary for purposes of practical emphasis and effectiveness. Government did in those days profess an exaggerated respect for Classical Political Economy, for which they seemed to claim universal authority and sometimes the only way of correcting exaggeration in one direction is overstatement in the other direction. Ranade wrote at a time when the habit was common of appealing with too much confidence to the so-called eternal Laws of Economics for settling practical questions, without adequately realising the necessity of guarding theoretical conclusions by historical and inductive study so as to ascertain the extent of their applicability to a particular human society. Ranade's work in India bears a close resemblance to the parallel achievement in Germany of Friedrich List, who in his "National System of Political Economy" (1842) protested emphatically against the dogmas and the so-called universal truths of Classical Political Economy. "It was particularly against the cosmopolitan principle in the modern economical system that he protested, and against the absolute doctrine of free trade, which was in harmony with that principle. He gave prominence to the national idea, and insisted on the special requirements of each nation according to its circumstances, and especially to the degree of its development."* In fact, Ranade drew his inspiration principally from the writings of List, and in his generation he performed for his country the same kind of valuable service that List did for Germany. However, he set the fashion in this matter which has continued much beyond its proper time. There is, for example, much less justification for the opinion that is sometimes advanced even today that hardly any of the assumptions of Political Economy are applicable to Indian conditions and that "the great

* Article on F. List in Encyclopaedia Britannica, 11th edition. .

hedonistic principle requires not merely tinkering modifications here and there : it ceases to be serviceable altogether in India.”* Opinions of this character sometimes lead people to suppose that a special study of Indian economic problems requires an altogether new economic technique, the Western technique being pronounced utterly valueless for this purpose.

§ 8. Western Economic Theory and Indian Economics:—As a matter of fact, however, in dealing with Indian economic problems we have to invoke the aid of Western economic theory at every step. Also, as Prof. Brij Narain has pointed out in his *Essays on Indian Economics*, *since Ranade wrote, both political Economy and India have changed their character*. Political Economy has learnt properly to emphasise the hypothetical nature of its conclusions and has become chary of claiming universal validity for them.† It has also become more human and practical by modifying its assumptions so as to bring them more into accord with actual conditions, and by losing its old-time artificial simplicity it has vastly increased in usefulness. Indian conditions have also undergone a very considerable change during the last forty years and are tending to approximate more and more rapidly to Western conditions. We believe that the time has arrived when more is to be gained by stressing the points of similarity between Indian and European economic evolution than harping ceaselessly and unprofitably on the points of difference. ¶

§ 9. Principal topics of Indian Economics:—Before concluding this chapter we may briefly indicate the principal topics which our survey of economic conditions in India will cover. At the outset, the two primary factors of production of wealth

* See Prof. P. Anstey's Paper before the Third Indian Economic Conference at Madras.

† “The theory of Economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its possessor to draw correct conclusions.” Keynes' General Introduction to the Cambridge Economic Handbooks.

¶ In economics, as in other matters today, it is broadly true that “the difference between the East and West is one of longitude rather than of latitude both converging to the same point as do lines of longitude.”

viz. India's physical environment and her people will be dealt with. Next, since the institutional basis of a country affects its economic activity, a discussion of the social and religious institutions of India will follow. As a preliminary to a detailed examination of the main branches of production in India it will be convenient to mark the actual stage in economic transition reached by India at the present moment. We shall then turn to discuss more particularly Indian Agriculture and Industries. In this connection, several questions of great importance will have to be treated, such as Irrigation, Consolidation of Holdings, Rural Indebtedness, Co-operation, Land Tenures and Famines, on the agricultural side; and Large-scale and Cottage Industries, Foreign Capital, Tariffs, Wages, Labour Legislation, etc, on the industrial side. We will then turn to take stock of the total volume of production in India with a view to ascertain the per capita income of the people of India. We shall next take up exchange-domestic and foreign--and as a prelude to this topic a survey of the Transport situation of the country will be attempted. A discussion of the Internal and International Trade of India will follow and the "Drain" Theory will be tackled in this connection. The treatment of the mechanism of exchange will necessarily involve an examination of the problems of Currency, Foreign Exchanges, Banking and Credit. The next and the last important group of subjects will bear on questions of Public Finance in India such as the Financial Relations between the Central and Provincial Governments, the principal Sources of their Revenue and Expenditure, the Nature of the Tax-system and the Incidence of Taxation, Public Debt etc..

CHAPTER II

INDIA'S PHYSICAL ENVIRONMENT AND NATURAL RESOURCES

§ 1. Natural Resources and their Importance :—The important rôle played by natural resources in determining the economic life of a nation can hardly be exaggerated. Even in the case of England, as Prof. Nicholson observes “in spite of the predominance of her trade and her manufactures, natural conditions are of primary importance. The coast-line and rivers, the proximity of rich coal and iron fields, the temperate, moist climate, and the fertility of the soil, are still the foundations of the wealth of the nation” (Nicholson—Political Economy, vol. I p. 66). And although with the growth of knowledge and intelligence the mastery of man over nature may increase, there are definite limits to this process and in the last resort, man must depend upon the materials and powers of nature.

In this chapter, we will, therefore, begin our inquiry into the economic position of India by a brief description* of her physical environment.

§ 2. India: Area and Population :—British India is 109,3074 square miles in area with a population of 247,003,293 people, while 709,583 square miles of territory with a population of 71,939,187 people is under Indian States and Agencies. The length of the country from north to south is about 2,000 miles and about 2,500 miles from east to west. India is thus a country of huge dimensions being 15 times as large as Great Britain and equal to the whole of Europe excepting Russia. It has a land frontier of about 6000 miles and the length of her coast-line is roughly 5000 miles. *India is thus a world in itself.*

§ 3. Geographical location :—Geographical location at all times important, becomes increasingly so in the later stages of

*This description is largely based on the “ Empire of India ” by Bampfylde Fuller, ch I and the Imperial Gazetteer of India Vol. I.

economic and commercial development. India occupies a highly favourable situation as regards the rest of the world for purposes of international trade. She stands at the very centre of the Eastern Hemisphere and commands trade-routes running in all directions. On account of her extensive sea-board the sea-routes are by far the most important and if she is provided with the requisite maritime equipment, she bids fair to become one of the principal carriers of the world's trade. Before this consummation is achieved, however, much spade-work will have to be done to remove certain handicaps India is labouring under at the present moment.

§ 4. Deficiency of Harbours :—One of these handicaps is the deficiency of natural harbours such as would accommodate modern vessels. The ports on the western coast with the exception of Karachi, Bombay and Mormagao are practically closed to traffic throughout the monsoon period. The east coast is surf-bound and without any natural harbours. The harbour of Madras, however, has been greatly improved by an expensive outlay on the construction of sea-walls. The extension and improvement of the Vizagapatam harbour being carried out at the present moment may be regarded as another effort to overcome partially the difficulties arising from the absence of indentations on the east coast. Calcutta although otherwise admirably situated suffers from the bars which tend to form in the Hooghly and Chittagong is in a similar case. Rangoon, Moulmein, Bassein and Tavoy besides being distant from the sea are subject to the additional handicap of unsatisfactory communication with the interior. It is, therefore, easily understandable why six-sevenths of India's foreign trade is confined to five ports viz. Calcutta, Bombay, Rangoon, Madras and Karachi of which Karachi and Bombay are the only natural harbours.*

*The following is a complete list of the principal ports of India :— Aden, Karachi, Ketī Bander, Sirganda, Mandvi, Dwarka, Porbander, Div, Surat, Daman, Bombay, Murmogao, Manglore, Tellicherry, Mahe, Calicut, Kochin, Alleppey, Quilon, Tuticorin, Dhanushkodi, Negapatam, Karikal, Cuddalore, Pondicherry, Madras, Masalipatam, Bimlipatam, Gopalpur, Balasore, Chandbali, Cuttack and False Point, Calcutta, Chittagong, Akyab, Bassein, Rangoon, Moulmein, Tavoy, Mergui. (Cotton's Handbook of Commerce).

A vigorous policy calculated to increase the number of suitable harbours involving the construction of new harbours as well as the revival of old neglected ones, such as Surat, so as to cater effectively both for the coastal as well as the foreign trade is clearly indicated in view of the present unsatisfactory position.

§ 5. The Shipping Position:--The shipping position of India today gives cause for much dissatisfaction as India has hardly any mercantile marine of her own worth the name to justify her old traditions of maritime activity. The Scindia Steam Navigation Company started in recent years is the first important Indian marine venture and marks the beginning of a new shipping career for India. The appointment of the Mercantile Marine Committee may be taken as a welcome though somewhat belated evidence of Government interest in the matter. The recommendations of the Committee and Government action thereon will be reviewed later on.

§ 6. Inland Communications:--Passing on to the consideration of the situation with regard to inland communications the principal ports of India are already connected with internal trade centres by a net-work of railways and roads.* The position in regard to internal communications is easier in Northern India than in the Peninsula. Apart from the possession of navigable rivers, the great plains of Northern India lend themselves to easy construction of roads and railways unlike the Peninsula where the rugged and mountainous nature of the country places great obstacles in the way of road and railway construction which can only be overcome at great expense. The contrast with respect to river navigation between the Peninsula and Northern India has already been alluded to. We propose to discuss at greater length the whole transport situation in a separate chapter.

§ 7. Attempts to overcome disadvantages of physical location:--Referring to the possibility of overcoming the disadvantages of

* The principal trade centres of India are the following:--Calcutta, Bombay, Madras, Rangoon, Karachi, Cawnpore, Delhi, Ahmedabad, Amritsar, Agra, Bangalore, Lahore, Benares, Lucknow, Nagpore, Jubbulpore, Mirzapore, Madras, Lashkar (Gwalior), Dacca, Mandalay, Srinagar. Other centres:--Sholapur, Amraoti, Hyderabad (Deccan), Allahabad, Jypore, Baroda, Mysore, Hubli. (Cotton, Op. Cit.).

physical location, Seligman speaks of a three-fold improvement viz. as regards (i) transportation of men and commodities, (ii) transmission of power, and (iii) communication of ideas. We have already dealt to some extent with the first of these topics. The question of transmission of power will receive treatment later on in this chapter. As regards communication of ideas or intelligence, the Post, the Telegraph, the Telephone and the Wireless have gone a long way towards reducing the significance of geographical location and have become important adjuncts of modern trade and economic activity. Although, some of these agencies like the Post and Telegraph are now sufficiently familiar and widespread in India, and have, in conjunction with improvements in transport transformed, in many ways, the economic life of the country. The isolation of the village is largely a thing of the past, as is the isolation of the country as a whole from the rest of the world. India, is, however, still backward in the use of Wireless for the spread of commercial intelligence, while the Telephone is as yet scarcely pressed into service except in the bigger towns.

§ 8. Four well-marked Divisions of India:—It is usual to point out that India falls into four well-marked divisions. There is first the Peninsula of India embracing the country lying south of a line stretching from Karachi to Delhi, and from Delhi to Calcutta. Secondly, there is the Indo-Gangetic Plain between the Peninsula and the Himalyas forming the most extensive sheet of level cultivation in the world. Thirdly, we have the Himalayan range overlooking the Gangetic Plain. Lastly, there is Burma to the east.

§ 9. (i) The Peninsula:—This is an elevated plateau separated from the Indo-Gangetic Plain by the Vindhya and Satpura ranges, a line of low hills and scarps. It is flanked by coast ranges known as the Western and Eastern Ghats of which the Western Ghats are much the more considerable and form a gigantic and continuous sea-wall, pierced by no valleys of any size and unbroken except for a very curious gap, 200 miles from its southern extremity. The Eastern Ghats are much less formidable and are interrupted by broad valleys which lead to the drainage of the Peninsula into the Bay of Bengal by rivers like the Mahanadi, The Godavari, the Krishna and the Cauvery. There is only a narrow strip of land between

the Western Ghats and the sea on the ocean side of the Bombay Presidency, a fact which makes penetration inland on this side from the sea difficult and even the monsoon clouds are compelled to deposit their moisture on the mountainous barrier making the inland region peculiarly liable to droughts and famine. There is, however, considerable space between the Eastern Ghats and the coast. With the lower sea walls of the Eastern Ghats the monsoon can sweep inland more easily and consequently the Eastern parts of the Peninsula enriched by its rivers providing much low-lying fertile soil supports a dense population and is comparable in this respect to the plains of the North.

The surface of the Peninsula is generally uneven and rocky with more or less forest-clad hill-peaks and ranges and it affords many contrasts in vegetation and scenery. In the east, the low hills look down upon stretches of rice land; to the west, as the land rises—for the Peninsula tilts like the roof of a house from west to east—and the regions of comparatively scanty rainfall are reached, rice gives place to millets and cotton grown on broad treeless tablelands.

§ 10. (ii) The Indo-Gangetic Plain:—This is entirely composed of rivers and silt and is traversed by two great river systems tending in two directions. The five western rivers which give the Punjab its name, flow down the lower reaches of the Indus into the Arabian Sea. Seven other large rivers to the east including the Ganges and the Jumna similarly unite in the Ganges to reach the Bay of Bengal. Approaching the sea, their waters are mingled with those of the Brahmaputra which flows from the east down the valley of Assam. The silt borne by the waters of these rivers is gradually enlarging an extensive delta at the head of the Bay of Bengal upon which is situated the city of Calcutta.

§ 11. (iii) Himalayan and Peninsular Rivers:—We may here indicate the broad distinction between the Himalayan rivers which water the Indo-Gangetic Plain and the Peninsular rivers. The former are as a rule perennial as they receive a plentiful supply of water even in summer from the melting of the Himalayan snow. Flowing through broad basins, they form large tracts of rich alluvial soil on either side. It is no wonder therefore, that their

fertile basins have been the seats of the ancient Aryan civilisation and even today play the rôle of the natural granaries of the country. Some of them like the Irravaddy, the Ganges and the Indus are navigable and served as great carriers of commerce in the pre-railway days. They are also the feeders of those important productive irrigation works on which the prosperity of the Punjab, Sind and the U. P. so largely rests. The Peninsular rivers on the other hand, while they flow in torrents during the monsoon shrivel up into mere puddles during the hot weather. Many of them cut their way through deep gorges making navigation impossible. A different and more costly system of irrigation works necessitating the construction of huge reservoirs in their valleys to store up the rain water has had to be devised to overcome the periodical deficiency of water from which they suffer.

§ 12. (iv) The Himalayas:--The Indo-Gangetic Plain is dominated by the Himalayas, the highest mountains of the world, some of whose peaks rise to a height of 30,000 feet. As has been mentioned above, it is the melting of the snow of the Himalayas which contributes the necessary water-supply to the great rivers that irrigate the plains of Northern India. At either end of the Himalayas there is an abrupt change in the trend of the mountains. They run north and south instead of east and west and form, with the Himalayan chain, a three-sided barrier shutting in the plain of India from Afghanistan and Baluchistan. Apart from their political significance as an impregnable barrier the Himalayas exercise a dominating influence on economic conditions by their effect on rain, winds, heat, cold, moisture and vegetation.

§ 13. Burma:--Lastly, Burma in the east is really part of a separate Peninsula and presents many marked contrasts with India proper, from which till recently it was politically isolated. The fertile valley of the Irravaddy is the principal home of the Burmese people who, while connected by racial affinity with the wild tribes of the hills surrounding them, have evolved a high type of civilisation, though as regards general outlook and social organisation it differs from the civilisation of the Hindus. The vast natural resources of Burma in forest and mineral wealth still await economic exploitation and hold out a brilliant prospect of material progress for the country.

§ 14. Physical and climatic contrasts in India:—The physical and climatic contrasts between one part and another in India are very great. "In the north rise magnificent mountain altitudes bound by snow-field and glacier in eternal solitude. At their feet lie smooth wide spaces of depressed river basins either sandy, dry and sun-scorched, or cultivated and water-logged under a steamy moisture-laden atmosphere. To the south, spreads a great central plateau where indigenous forest still hides the scattered clans of aboriginal tribes; flanked on the west by the broken crags and castellated outlines of the ridges overlooking the Indian ocean, and on the south by gentle, smooth, rounded slopes of green uplands." (Imperial Gazetteer vol I. p. 1) "To one, for instance, who has gained his knowledge of India in lower Bengal, India is a country of almost constant heat and damp, luxurious vegetation, rivers, tanks, rice-fields, and coco-nuts, with few cities, and densely inhabited by a mild and timid population" (Strachey quoted in Knowles' Economic Development.) Transfer the scene to Agra or Lahore, and "instead of one of the dampest and greenest countries of the earth we find in the early summer one of the brownest and most arid—a country scorched with winds like the blast of a furnace, with a cold and bracing winter climate; instead of the tropical vegetation of Bengal we find thousands of square miles covered with wheat and barley and the products of a temperate zone. It is a country with famous cities and splendid monuments containing a strong and virile population."

Meteorologically, India presents a greater variety of conditions than probably any other part of the world, combining tropical and temperate region conditions in a most remarkable manner. "It is influenced from outside by two adjoining areas. On the north, the Himalayan range and the plateau of Afghanistan shut it off from the climate of Central Asia, and give it a continental climate, the characteristics of which are the prevalence of land winds, great dryness of the air, large diurnal range of temperature, and little or no precipitation. On the South, the ocean gives it an oceanic climate, the chief features of which are great uniformity of temperature, small diurnal range of temperature, great dampness of air, and more or less frequent rain.....In the cold season mean temperature averages about thirty degrees lower in the

Punjab than in Southern India. In the Punjab, the United Provinces and Northern India generally the climate resembles that of the Riviera, with a brilliant cloudless sky and cool dry weather; In South India, it is warmer on the West coast than on the East, and the maximum temperature is found round the headwaters of the Kistna. Calcutta, Bombay and Madras all possess the equable climate that is induced by the proximity to the sea, but Calcutta enjoys a cold season which is not to be found in the other presidency towns, while the hot season is more unendurable there."

§ 15. Seasons in India :—"The hot season begins officially in the Punjab on the 15th of March and from that date there is a steady rise in the temperature, induced by the fiery rays of the sun upon the baking earth, until the break of the rains in June. During this season the interior of the Peninsula and Northern India is greatly heated; and the contrast of temperature is not between Northern and Southern India, but between the interior of India and the coast districts and the adjacent areas. The greater part of the Deccan and the Central Provinces are included within the hottest area, though in May the highest temperatures are found in upper Sind, north-west Rajputana, and south-west Punjab. At Jacobabad, the thermometer sometimes rises to 125° in the shade." (Article on India: Encyclopaedia Britannica vol. 14 P. 379.) *Where the seasons are clearly defined in India they are three in number:—*(i) A cool dry season (winter) when northerly trade winds prevail and when there is little or no rainfall except in the northern provinces where moderate cyclonic storms occasionally occur. (ii) A wet season, sultry and oppressive with the inflowing south-west monsoon of summer and (iii) A hot dry season before the beginning of the rains which usually comes suddenly with heavy thunderstorms.

§ 16. Rainfall :—The normal annual rainfall varies from something like 460 at Cherrapunji in the the Assam hills to less than three inches in Upper Sind. Climatically the Indian Peninsula is part of the great monsoon area of Asia, and exhibits the monsoonal control in a more perfect form than any other part of this area. The term monsoon technically applies to the reversal

of winds which takes place throughout the monsoon area and which divides the climatic year into two distinct periods, that of the south-west monsoon, and that of the north-east monsoon. The south-west monsoon is really an extension of the south-east trade winds which cross the equator and are then deflected to the right becoming south-west winds. By July the system is fully established over India, the winds being generally south-west over the Deccan, south over the Ganges delta, and south-east up the Ganges valley. The Indus basin is the last area reached by these winds, and the first from which they retreat, so that here the yearly rainfall is very low. It is heaviest on the Western Ghats, the Himalayas, and in Burma, where it is accentuated by the relief of the land. In September the force of the monsoon begins rapidly to decline, and after about the middle of the month it ceases to carry rain to the greater part of north-western India. In its rear springs up a gentle, steady north-east wind, which gradually extends over the Bay of Bengal and is known as the north-east monsoon. The rainfall of India has a definite periodicity due to this monsoonal control and for this reason the climatic year may be divided as follows:—(A) Season of the south-west monsoon. (i) middle of June to the middle of September—season of general rains. (ii) middle of September to the middle of December—season of retreating monsoon. (B) Season of North east monsoon. (i) January and February—cold weather season. (ii) March to middle of June—hot weather season. One set of crops is sown in June and reaped in autumn viz. rice, cotton, Bajra etc. This is called the Kharif crop. The second set of crops is sown when the monsoon ends i. e. about the middle of September viz. wheat, barley, linseed etc. and is reaped between January and March. This is called the Rabi crop.

§ 17. Vital importance of Rainfall:—This is only a *general description* of the climatic and agricultural regime throughout India *subject to qualifications when applied to any particular part of the country*. But it serves to bring out *the importance to the country as a whole of the seasonal rainfall*, fluctuations in which as regards quantity, distribution and timeliness bring misery or prosperity to millions of the people.* Perhaps in no other region of the world

* "For several months in every year India is on trial for her life and seldom escapes without a penalty" (Knowles, *Economic Development* p. 28)

does the rainfall enter so much into every aspect of life as in India owing to the fact that life here is primarily based on agriculture which is dependent for its very existence on the rainfall, in its turn almost wholly dependent on the south-west monsoon, which accounts for nearly 90% of the total rainfall. The south-west monsoon is from this point of view far more important than the north-east monsoon and may be described as the pivot upon which the whole of Indian life swings. Failure of rain at the proper time being so disastrous in its consequences, the need is particularly urgent in India for artificial irrigation in the shape of wells, tanks and canals to regularise and economise the water-supply of the country.

The peculiarity about the Indian rainfall as will have been gathered from the foregoing description is its marked discontinuity. In Europe rain may be expected at any time of the year. In India it is confined to certain definite seasons.

§ 18. Lack of uniformity in Rainfall:—The lack of uniformity from place to place as regards the amount of annual precipitation has been already alluded to and it has been made the basis of the following classification:—(i) Areas of almost unfailing rainfall including Burma, Assam, Eastern and Lower Bengal and the coast strip between the Western Ghats and the Arabian sea, from the extreme South of the Peninsula to the southern boundary of Surat district. (ii) Areas of uncertain and precarious rainfall varying from 10 to 30 inches, for instance, Udaipur, Ajmer and Bombay Deccan excluding the Western Ghats. (iii) Areas of drought where cultivation without irrigation is exceedingly precarious and in some cases impossible such as, Upper Sind, Western Rajputana, Western Punjab ect.

§ 19. Climate:—The climate of a country has a far-reaching effect on the economic efficiency of the people inhabiting it. It is impossible to make any general statement about the climate of India because, as we have seen, within its boundaries almost any extreme of climate that is known to the tropics or the temperate zone may be found. On the whole, however, the Indian climate may be described as semi-tropical and its effect on the human frame is depressing in contrast with the bracing effect of the climate of the temperate zones leading to a relatively low tone of

health and physique of the population of the country and it must be admitted that a more favourable climate is at least one of the causes of the superior efficiency of European as compared to Indian labour. The influence of climate in this connection, although it must not be exaggerated must none the less be recognised.

§ 20. Tropical climate in relation to Economic Progress :—It is commonly urged that in the tropics nature yields the means of livelihood with comparatively little effort on the part of man (whose needs, moreover, are much more modest in the tropics than in the temperate regions) and makes him disinclined to constant struggle and forethought and to the vigorous employment of all his faculties. In the temperate regions on the other hand, a more economical nature yields nothing except in response to hard labour. Work being a universal necessity, labour becomes dignified, well-paid, intelligent and independent. As the winter is cold and stormy, it necessitates forethought in the preparation of clothing, food and shelter during the summer. Carefully planned, steady, hard work is the price of living in these zones and this encourages the development of a high type of civilisation.

Prof. Carr-Saunders, however, has recently combated the view that when nature yields her gifts too easily economic progress and civilisation lag behind. He holds on the contrary that " it is in those regions where there is the greatest abundance in quality and quantity of useful objects that there will be the greatest chance of their usefulness being observed and that there will be secured the highest return per head from any improvements in them. The greater the fertility, therefore, the greater the incentive to skill." (Carr-Saunders, Population Problem p. 422). However that may be, neither the tropical climate nor the fertility of India have prevented the rise of a glorious civilisation there in the past. The present backwardness of the Indian people and the spirit of apathy and listlessness which characterise them today must be sought in other causes than the climate of the country or the bountifulness of nature.

§ 21. Forests :—Among the most valuable natural resources of India must be reckoned her magnificent forests. The character of the forest in the country is largely governed by rainfall and

elevation. Where the former is heavy, ever-green forests of palm, ferns, bamboos, and India rubber trees etc. are found. Under a less copious rainfall deciduous forests appear containing teak, sal, and a great variety of other valuable trees. Under a still smaller rainfall the vegetation becomes sparse containing Acacias, Tamari etc. In the Himalayas, sub-tropical to arctic conditions are found and the forests contain according to elevation pines, furs, deodars, oaks, chestnuts, magnolias, bamboos etc. It has been the experience of all countries that the natural processes of growth and reproduction by which forests are kept alive are incapable of keeping pace with man's destructiveness and the State has generally found it necessary to take special measures in the ultimate interests of the country for preserving its forests from reckless destruction. Although the question whether forests are required to be maintained in a particular country and if so, to what extent, depends on certain special conditions such as the position of the country, its communications, the possibilities of other uses for land than for growing forests, the density of population, the amount of capital available for investment etc., there is a consensus of opinion that *the forests of India are a valuable national asset and their proper conservation constitutes one of the most important economic functions of the Indian Government.*

Q. 22. Utility of Forests :—In the economy of man and of nature forests are of direct and indirect value. Among *the indirect uses of forests* are the following—(i) Forests render the climate more equable, increase the relative humidity of the air, reduce evaporation and tend to increase the precipitation of moisture. (ii) They help to regulate the ~~water~~ supply, produce a more sustained feeding of springs, tend to reduce violent floods, and render the flow of water in rivers more continuous. (iii) They increase the fertility of the soil as they are capable of forming rich vegetable mould even from mineral soils. (iv) They reduce the velocity of air-currents, protect adjoining fields against cold or dry winds, and afford shelter to cattle, game, and useful birds. (v) Under certain conditions they may improve the healthiness of a country and render assistance in its defence. (vi) They increase the beauty of the country and produce a healthy aesthetic influence upon the people.

The direct utility of forests is chiefly due to their produce such as timber and firewood and raw material they afford for various

industries. Another important use, especially in India, is the grazing for cattle which they provide. This is, however, liable to interfere seriously with the preservation of the forests. To meet both requirements the method adopted in India is to close entirely to grazing part of the forest area and to close another part only against the grazing of certain animals like goats, sheep and camels and leave a large area open to the grazing of all kinds of cattle. The areas closed in ordinary years constitute reserves of fodder for years of scarcity and famine when they are either opened to grazing or grass is cut in them and sent to districts where it is badly wanted. Although the service rendered in this way is valuable, the complaint is often heard that the Forest Administration in India is less sympathetic to the needs of the agricultural population than it might be, consistently with a proper discharge of its primary duty of forest conservation and development. A closer co-ordination than at present obtains between the Forest Department and those Departments like the Agricultural and Co-operative, which concern themselves directly with the question of promoting the welfare of the agriculturists, is desirable in order to reconcile the two conflicting points of view. Although the principal function of forestry is the preservation and development of forests we must never lose sight of the fact that it has also an important vocation as the hand-maid of agriculture, because forests can supply many of the needs of the peasant such as fire wood to replace manure used as fuel, small timber for houses and wood for implements as well as grazing and fodder for the cattle—concessions to which the Indian farmer has been accustomed for long centuries and the sudden curtailment of which is resented by him as arbitrary and unduly harsh.

§ 23. Forest Conservation :—The process of reckless destruction of forests went on for centuries in India even before the advent of British rule. In the early years of the British rule this destruction became intensified owing to various factors such as increase of population, multiplication of herds of cattle, extension of cultivation and the demand for timber and firewood on the part of railways. Government eventually became alive to the necessity of putting a stop to this process of reckless deforestation and the *first organised steps to protect the forests were taken during Lord*

Dalhousie's regime about the year 1855. At that time Conservators of Forests existed in Bombay, Madras and Burma. Soon afterwards other appointments followed and in 1864 an organised state department under an Inspector-General of Forests was established. Since then the Indian Forest Department has grown and now controls more than one-fifths of the total area of British India.

§ 24. Area under Forest in India :—The following table gives the total forest area in British India and its distribution by provinces.

*Table relating to Area under Forest Lands etc.

Province	Area of Province	Forest Area				Proportion of Forests to the whole area of the Province
		Reserved Forests	Protected Forests	Unclassified State Forests etc.†	Total	
	Sq. Miles	Sq. Ms.	Sq. Ms.	Sq. Ms.	Sq. Ms.	Per cent
Madras ...	143,290	19,012	...	328	19,340	13·5
Bombay ...	123,125	13,773	1,229	...	15,002	12·1
Bengal ...	76,755	5,278	1,806	3,445	105,29	13·7
United Provinces ...	106,720	5,158	4	39	5,228	4·8
Punjab ...	97,281	1,652	4,372	671	6,695	6·8
Burma, including Shan States etc...	243,207	28,372	...	95,374	123,746	67·7
Bihar & Orissa ...	82,939	1,785	994	1	2,780	3·3
Central Provinces and Berar ...	99,927	19,677	...	...	19,677	19·6
Assam ...	51,825	5,795	...	14,814	20,771	40·0
North-West Frontier Province ...	13,099	236	...	9	245	1·8
Baluchistan ...	54,228	313	...	472	785	1·4
Ajmer-Merwara ...	2,767	142	...	...	142	5·1
Coorg ...	1,582	519	...	...	519	32·8
Andamans and Nicobars ...	3,143	52	...	2,139	2,191	69·7
(1)						
Total, 1925-26 ...	1,099,888	101,953	8,405	117,292	227,650	20·7
(1)						
Total, 1916-17 ...	1,078,585	100,308	9,140	137,131	246,579	22·9

*See Statistical Abstract for British India from 1916-17 to 1925-26.

† "Public Forest Lands" as they are often called.

(1) Excludes Delhi Province etc.,

§ 25. **Classification of Forests :—**Forests in India are classified as Reserved, Protected and Unclassed State Forests in descending order as regards the control exercised by Government in respects of rights of user of individuals and the public. The area under Reserved, Protected and Unclassed Forests respectively has been already indicated in the table given above.

§ 26. **The object of forest administration :—**The object of forest administration is to eliminate the danger of overworking the forests and at the same time improve their yielding capacity and on the whole Government have succeeded remarkably well in fulfilling both these objects. For the first fifty years of the existence of the Forest Department in India, the potential value of research into forest economics was not recognised by any special steps being taken by Government for the promotion of research. A Forest Research Institute was, however, established in 1906 at Dehra Dun and has been recently enlarged considerably in accordance with the recommendations of the Indian Industrial Commission of 1918. As a result of this many valuable investigations have been undertaken and steady progress is being registered in scientific and practical knowledge which should ultimately lead to the fuller and better utilisation of the raw products yielded by Indian forests. The average out-turn of timber and fuel from the forests during the quinquennium which ended on the 31st March 1924 was 36,06,40,000 cubic feet. The Burma forests are the largest and most important of the Indian forests and yield a revenue of over two crores of rupees per annum from the output of tea in them.

§ 27. **Indian forests as suppliers of raw materials :—**The Indian Forests also play an important role as suppliers of the necessary raw materials for various industries and as providers of employment for large numbers of people. There is, for example, a considerable jungle population deriving sustenance directly from the products of the forests. Then there is a large number of wood-cutters, sawyers, carters, carriers, raftsmen etc. working in and near the forests. Lastly, there are those engaged in working up the raw products of the forests, for instance, carpenters, wheelwrights, boat-builders, rope-makers, tanners, lac manufacturers etc..

§ 28. Major and Minor Forest Produce:—Forest produce is divided into two main heads:—(i) Major produce i. e. timber and firewood and (ii) Minor produce i. e. comprising all other products such as lac, tanning materials, essential oils, turpentine and rosin. The minor products from Indian forests are increasing in importance and many of them have already established themselves in the markets of the world. One of the important results of research has been to prove that bamboos can be utilised for the manufacture of paper pulp in addition to grasses like *sabai and bhabar* which have already been in use e. g. in the Calcutta Paper Mills. With our extensive forest areas of bamboo and savannah we may expect before long to produce within the country all the paper we require. In this connection we may note that having regard to these possibilities Government have recently granted protection to the Indian bamboos paper-pulp industry as recommended by the Tariff Board.

§ 29. Potentialities of Indian Forests:—India had to depend on her own resources for supplying the needs of the British armies engaged during the late War in Mesopotamia etc., and the special effort put forth for fulfilling this function on an adequate scale brought out, in a striking manner, the great latent possibilities of Indian forests and may be said to have opened a new era in forest exploitation and a steady and extensive development of industries dependent on the forests may be confidently anticipated in the near future. The financial results of Indian forest administration will be noticed in our chapter on Indian Finance.*

§ 30. Geological composition:—(i) The geological survey of a country includes the consideration of its surface soil and sub-soil. We shall first deal with the surface soil of India indicating the broader differences characterising the chief kinds obtained from the three principal geological formations. The alluvial tracts are the most extensive and agriculturally the most important. They occupy the greater portions of Sind, Gujarat, Rajputana, the Punjab, the

* For our account of forests our special indebtedness to the following sources is obvious :—(i) Encyclopaedia Britannica: Article on Forests and Forestry, and (ii) the Indian Year Book (Times of India.).

United Provinces, Bengal and the Godavari, Krishna and the Tanjore Districts of Madras. An alluvial strip of varying width extends along the eastern and western coasts of the Peninsula widening at the deltas of the great rivers of Peninsular India in many places. With moderate and well-distributed rainfall the alluvial soils especially of the Indo-Gangetic plains which are for the most part porous in texture, easily ploughed and naturally endowed with a sufficiency of chemical and organic ingredients are capable of growing most of the Kharif and Rabi crops. (ii) The Deccan trap formation covers the greater part of the Bombay Presidency, the whole of Berar, the Western third of the Central Provinces and the Western part of Deccan Hyderabad. The soils throughout this area vary greatly in character and fertility. True black cotton soil occurs within the area of the Deccan trap in undulating or sloping situations, before the general level of the foothills. It varies in depth according to position and where very deep, has been accumulated by alluvial deposits, and owing to its dense consistence in places like the valleys of the Tapi, Narmada etc. becomes unworkable during heavy rain and is better adapted for *rabi* crops of wheat, linseed, gram; and the black cotton soil of the Deccan trap area which grows cotton and Jwar as staple crops in the Kharif season is as a rule only three or four feet deep and is mixed with limestone and small fragments of disintegrated trap. The sub-soil contains a good deal of lime and being shaly allows free drainage to the trap rock below. (iii) The remaining soils belong to what is known as the crystalline tract comprising almost the whole of Madras, Mysore, the south-east portion of Bombay, the eastern half of Hyderabad and two-thirds of the Central Provinces. Though on the whole deficient in chemical constituents and producing the poorest crops, certain varieties, for instance, the red or the red-brown loams and clay loams in Mysore and Madras are very fertile. Soils of the medium fertility are also found in considerable variety and those of fair or good depth can be irrigated with advantage and yield rice as the chief crop where canal irrigation is available and other valuable crops grown with the help of tank and well irrigation. The reddish brown or yellow-red soils of this formation found in Belgaum, Dharwar etc. are specially suitable for the growth of fruit-trees, particularly mangoes.

§ 31. Minerals* :—In the opinion of the Industrial Commission (1918) the mineral deposits of India are sufficient to maintain most of the “key” industries except those that require vanadium, nickel and possibly molybdenum (Industrial Commission’s Report p. 38). The belief was, however, current for a long time that these deposits were as a rule too poor to be worked profitably on the modern scale. Up to the early eighties, practically nothing had been done in the experimental development of Indian minerals and therefore it was not possible to form any reliable judgment regarding the mineral potentialities of India. Subsequent investigations, however, have led to the discovery and opening up of many kinds of mineral deposits so that we now know, with some approach to accuracy, the capabilities of India with regard to minerals. In the light of this knowledge it is possible to avoid exaggerated views about India’s advantages as well as limitations in this respect. *Although India’s mineral resources cannot be spoken of as unlimited or unparalleled as some enthusiasts would have it, they are nevertheless sufficiently great to fill us with a quiet satisfaction and the well-founded conviction is now pretty general that India will before long occupy an important place amongst the metallurgical nations of the world. (For the quantity and value of the chief minerals see Table on p. 28.)*

We shall now proceed to take a brief survey of some of the most important minerals exploited on a commercial basis in India.

§ 32. Coal:—With the exception of the United Kingdom India produces more coal than any other part of the British Empire. Most of the coal raised in India comes from Bengal, Bihar and Orissa. Outside these provinces the most important mines are Singareni and Sasti in the Hyderabad State, in Central Provinces, Burma, Assam, Punjab and Baluchistan. Rajputana, Bikaner and Central India also contribute a small amount to the (After this read page 29).

* The following sources have been consulted in preparing the section on minerals:—Handbook of Commercial Information for India by Cotton (2nd ed.), ‘India’s Mineral Wealth’, (‘India of Today’ Series,) and The Indian Year Book. (Times of India.)

The following table gives an idea regarding the quantity and value of the chief minerals in India including Indian States :-

Name of mineral.	Quantity.	1916-17 ValueRs.	Quantity.	1925-1926. Value Rs.
Coal (tons.)	17,254,309	5,81,78,459	20,904,377	12,64,00,908
Salt "	1,488,570	1,09,24,857	1,295,144	75,42,555
Gold (ounces)	598,370	3,45,45,342	393,875	2,22,57,562
Patroleum Gallons	297,189,787	4,58,66,492	289,606,542	10,29,51,666
Saltpetre (Cwts)	513,435	93,77,830	*126,973	*19,63,301
Chromite (Tons)	20,159	2,46,010	37,452	5,34,280
Copper-ore (Tons)	2,671	69,090	8,029	34,88,552
Diamonds (Carats)	20	5,414	48	14,598
Graphite (Tons)	1,318	22,520	...	...
Iron-Ore (Tons)	411,809	5,11,485	1,544,578	44,79,101
Jade-stone (Cwts)				
(a)	6,136	12,24,880	(b) 972	162,751
Lead (Tons)	13,790	64,20,975	47,275	2,21,07,128
Magnesite (Tons)	17,640	2,10,980	29,620	4,14,680
Manganese-Ore (")	625,204	2,23,05,393	839,461	3,48,09,025
Mica (Cwts)	43,400	16,38,664	45,990	21,99,516
Monazite (Tons)	1,292	5,65,710	...	...
Platinum (Ozs.)	9	694	...	...
Rubies (Burma)				
(Carats)	209,724	5,62,695	149,037	3,65,139
Silver (Ounces)	760,374	13,30,313	4,856,422	93,83,189
Tin-Ore (Cwts)	9,313	5,89,530	46,160	35,63,481
Wolfram (Tungsten-Ore) (Tons)	3,692	74,60,955	772	4,51,864
Zinc-Ore (Tons)	3,198	87,396	(c) 20,967	20,79,794

* Export Figures (Nearly the whole of the output).

(a) Exports by sea and land.

(b) Exports by sea only.

(c) Export figures.

(See Statistical Abstract for British India from 1916-17 to 1925-26.)

total coal-supplies of India. *Indian coal is thus very unevenly distributed* the deficiency being especially marked in the case of the Peninsula. The absence of coal supplies in Madras coupled with the high cost of railway transport acts as a great handicap to the successful exploitation of the iron ores of the Presidency. Even in Bombay a similar difficulty arising from a lack of local supplies of coal has had to be overcome partially by the use of hydro-electric power and the import of South African coal. Another defect of Indian coal lies in the fact that it is generally *poorer in quality than foreign coal*.

The imports of South African coal have been the cause of a good deal of discontent and in March 1924, The Legislative Assembly passed a resolution recommending the imposition of a countervailing duty on South African coal. As an outcome of this, the Indian Coal Committee was appointed in order to investigate the technical aspect of the matter before referring the question of protecting Indian coal from foreign competition to the Tariff Board. This Committee made various recommendations with a view to strengthening the position of the Indian Coal Industry and more especially to stimulate the export of Indian coal from Calcutta to Indian and foreign ports. The Committee found that the paramount considerations were those of quality and price. In order to secure the former, they recommended the establishment of a Coal Grading Board whose certificates would be accepted as a guarantee of the quality of the coal to which they related. This recommendation was accepted by Government. The necessary legislation in the shape of the Coal Grading Board Act, 1925, was passed in the Simla session of the Legislature and the Board was formally constituted on 20th January 1926. The Committee also recommended that the freight on certified export coal from the mines to Calcutta should be reduced by the grant of an increased rebate of $37\frac{1}{2}\%$ on railway charges and a reduction of four annas per ton on the river dues. These recommendations have been accepted by the Railway Companies concerned and the Port Trust authorities ("India in 1925-26" p. 298-99)

* Production of coal and its value, in 1925-26 and 1916-17.

Province.	Quantity (Tons)	Value (Rs.)	Quantity (Tons)	Value (Rs.)
Bengal	4,913,852	3,33,30,904	4,992,376	1,77,01,502
Punjab	74,662	6,13,124	47,449	3,27,395
Burma	25	(a)	...	...
Bihar and Orissa	13,938,509	7,94,93,131	10,767,683	3,21,80,534
Central Provinces	708,554	43,93,175	287,832	11,70,219
Assam	316,842	27,50,925	287,315	20,08,663
N. W. F. P.	...	...	75	375
Baluchistan	34,797	4,53,969	42,163	4,44,967
Total (British India)	19,989,241	12,10,35,228	16,424,893	5,38,33,655
Hyderabad	667,877	41,67,287	615,290	36,91,740
Central India	219,106	10,02,792	200,285	6,00,855
Rajputana	28,153	1,95,601	13,841	52,209
Total Indian States.	915,136	33,65,680	829,416	43,44,804
Grand Total	20,904,377	12,64,00,908	17,254,309	5,81,78,459

[a] Not available.

About 90 % of the total output is normally consumed in the country itself. India also exports a fair amount of coal the chief markets being Ceylon and Straits Settlement and the smaller ones, Aden, Java, and Summatra. In these over-seas markets as in the home market Indian coal has of late been subject to increasing competition with South African, Australian and Japanese coal.*

§ 33. Iron :—The knowledge of iron metallurgy is of high antiquity and before the competition of the imports of the metal from Europe the indigenous iron industry was in a flourishing condition and was carried on in all parts of the country.

The introduction of modern processes of iron manufactured on a large scale in India may be said to date from 1874 when the Barakar Iron Works started operations. These works later became

* See footnote * on next page, for Export and Import Figures.

the Bengal Iron and Steel Company, the forerunner of the present Bengal Iron Company. The Tata Iron and Steel Company was inaugurated at Sakchi in Bihar and Orissa in 1911. The manufacture and rolling of Indian steel was successfully established about the end of 1913 being facilitated by the proximity of coal-fields and iron deposits in Bihar and Orissa. The proper place for the discussion of the further developments of the Iron and Steel Industry will be in our chapter on Indian Industries.

In order to draw attention to the principal areas in which iron deposits are being worked at the present time we give the following table :—

Production of Iron-Ore and its value in

Province.	1925-26		and		1916-17	
	Quantity (Tons.)	Value (Rs.)	Quantity	Value	Quantity	Value
Bihar and Orissa	4,78,283	12,41,760	150,656	1,77,950		
Burma	51,617	2,06,468	16,081	6,030		
C. P. and Berar	1,037	4,182	4,464	22,395		
Other Provinces			54	75		
Total Br. India	530,937	14,52,410	171,255	2,06,450		
Mayurbhanj (Oris.)	957,275	28,01,825	240,520	3,74,900		
Mysore	56,218	1,54,000	...	...		
Other Indian states	148	866	34	135		
Total Indian states	1,013, 641	30,26,691	240,554	3,65,035		
Grand Total	1,544,578	44,79,101	411,802	5,11,485		

See Statistical Abstract 1925-26.

*Exports and Imports of Coal and Coke.

Exports.	1916-17	1920-21	1921-22	1923-24	1925-26
Quantity (tons)	832,118	1,144,411	114,732	132,548	240,962
Value (Rs1,000).	76,22	1,50,13	16,63	22,31	34,80
Imports.					
Quantity (tons)	49,114	36,996	1,501,187	614,308	402,147
Value (Rs. 1,000)	15,44	30,37	5,85,05	1,76,20	97,65

By far the most important of the iron deposits are those that occur in Singhbhum and the Keonjhar, Bonai and Mayurbhanj states of Orissa where recent "discoveries include what appears to be a range of iron ore running almost continuously for forty miles." It is said that at one place a ravine cutting across the iron ore range shows a continuous thickness of 700 feet of high grade haematite containing over 60% of iron and estimated to contain no less than 2,800,000,000 tons of ore. As we see our way in course of time to exploit such deposits of iron, India's present dependence on foreign supplies of iron must slowly but surely come to an end. (See Ronaldshay, *India: a Bird's Eye View* p. 174.)

§ 34. **Manganese:**—This is a very valuable industrial mineral. It has been asserted that at least 90% of the world's output of manganese ores is required for the Bessemer and open-hearth processes for the manufacture of steel. It is also used in the heavy chemical, electrical and glass industries. (*India of Today Series—"India's Mineral Wealth"* p. 67.). The manganese industry in India dates from 1892 when quarrying began in Vizagapatam in the Madras Presidency. In 1900-01, 90,000 tons were shipped but since then the Central Provinces have come to obtain the pride of place as the largest producers of manganese. (For quantity and value see page 33.) The industry reached its zenith in 1907 when India displaced Russia as the first among the world's producers of this metal, though in 1912-13 she gave way again to Russia. After 1914, however, Russian exports practically ceased. During the War with the increasing production of ferro-manganese in India and consequent rise of prices the production of manganese was considerably stimulated.

There has, however, been no appreciable effect on the quantity available for export which still remains very large being 604, 198 tons valued at Rs. 1,60,32,271. in 1925-26.

§ 35. **Gold:**—India contributes only about two percent of the world's production of gold. The most important gold producing area in India is the Kolar field in Eastern Mysore which contributes nearly 98% of the total Indian output. The greater portion of the balance comes from the Anantpur fields in Madras Presidency.

The Nizam's mine at Hutti was opened in 1903 but has not been worked since 1920. The gold dredging in the bed of Irravaddy proved disappointing its contribution being negligible. Insignificant quantities are also derived by washing in the Punjab, C. P. and U. P. In 1925-26, the total quantity of gold produced amounted to 393,875 oz. valued at Rs. 2,22,57,562.

§ 36. Silver, Lead, Zinc:—Silver has only since 1909 been added to the list of metals produced within the boundaries of the Indian Empire. Nearly the whole output is derived from Bawdwin in Upper Burma and is quite negligible in comparison with the country's needs, India being the largest consumer of the white metal. It is obtained as a by-product of the smelting of the lead—

The following table shows the quantity and value of manganese ore (P. 32 § 34.) produced in India in the different areas in 1924-25.

Province	Quantity (Tons)	1914-15 *Value Rs.	Quantity (Tons)	1925-26 *Value Rs.
Madras	60,018	7,98,989	32,334	9,34,684
Bombay	27,223	5,12,133	55,673	23,35,506
Bihar and Orissa	...	...	898	37,665
Central Provinces	564,890	1,13,68,411	622,342	2,75,56,004
Total Br. India	652,131	1,26,79,533	711,247	3,08,63,859
Chota Udaipur (Bombay)	...	...	6,805	2,81,508
Sondur State (Madras)	...	...	52,576	14,27,662
Mysore	18,055	2,73,082	29,680	8,37,182
Central India (Jhabua)	6,642	92,158	3,206	1,14,061
Gangapur (Orissa)	6,070	1,14,192	9,617	4,03,442
Kenohar (22)	...	...	26,330	8,81,311
Total Indian States	30,767	4,79,432	128,214	39,45,166
Grand Total	682,898	1,31,58,965	839,461	3,48,09,025

See Statistical Abstract for British India for 1923-24 and 1925-26.

...I. E. 5

zinc ores of Bawdwin. The opening-up of the great ore-deposit of Burma has made it possible to hope that before long Burma will be the chief new factor in the world's production of lead of which about 33,000 tons valued at Rs. 1,17,46,967, were extracted in 1921. The Indian consumption is about 14,000 tons per annum so that a large amount is available for export. These same deposits are also an important source of zinc of which a considerable quantity is exported. As in the case of lead so in the case of zinc also there is a prospect of India contributing an important portion of the world's supply. The deposits of Bawdin must also be mentioned in another connection, viz., that the lead-silver-zinc sulphides provide a reserve of sulphur enough to meet India's demands, for the present, for sulphuric acid which is so essential for the industrial advancement of a country.

§ 37. Petroleum :—There are two distinct oil-bearing areas in India on either side of the Himalayan arc; one on the east and by far the most important, includes Assam and Burma, contributing 95 % of the total output; the other on the west includes Punjab and Baluchistan. The most successful oil-fields are found in the Irrayaddy valley in Burma.

The production of petroleum in India has increased from about 118 million gallons in 1904 to 290 millions in 1925, the highest point being reached in 1921 of about 305 million gallons. The enormous home demand for kerosene now exceeds even the greatly increased Burma supply necessitating a large volume of foreign imports which have remained fairly steady in the neighbourhood of 50 million gallons. Out of the petroleum products of India practically no kerosene is exported, the chief articles of export being petrol, benzine, paraffin wax and candles.

In recent years a definite tendency towards a gradual decline of output due especially to the decreased yield of Yenangyaung, the oldest and the most developed of the Burmese fields, has established itself, and unless new fields of importance are discovered, it would seem desirable to follow a policy of careful economy rather than one of intensive development.

§ 38. Mica :—Mica is principally used in the electrical industry as an insulating medium, and it assumed a position of great importance during the War in connection with the developments of wireless telegraphy, of aeronautical science and of motor transport, which would have been impossible without it.

India has for many years been the leading producer of mica with an output of more than $3/5$ ths of the world's total. Mica is found in Bihar and in the Nellore, Salem and Malabar Districts of the Madras Presidency, Travancore and Ajmer-Merwara and other parts of Rajputana. In 1925-26, 99,699 cwts. valued at Rs. 1,06,33,123 were exported. This probably represents the total annual production of India.

§ 39. Wolfarm :—This is the chief ore in tungsten and is indispensable for the manufacture of high-speed steels invaluable for war purposes. Tungsten also enters into other important uses, for instance, the manufacture of wire for the filaments of incandescent lamps and for dyeing and fire-proofing etc.. Wolfarm mining commenced in India in 1910 and the very next year an output of 1300 tons made Burma the leading wolfarm-producing country in the world. The wolfarm deposits of Burma more particularly of the Tavoy fields were of the greatest importance to the Empire during the Great War. Since the close of the War the industry has languished owing to the withdrawal of the artificial war-time stimulus.

§ 40. Saltpetre :—There was a time when India possessed a practical monopoly of the world's supply of nitrates so important in the manufacture of explosives and chemical manure. But partly owing to the tariff policy of the Government of India which for sometime tried to exploit the Indian monopoly for revenue purposes by the imposition of a heavy export duty and partly owing to other causes, India was dislodged from this position by rival foreign producers. During the War a certain revival in the production of Indian saltpetre has taken place. Saltpetre is in considerable demand for industrial purposes, for instance, in connection with the manufacture of glass, for the preservation of food and for manurial purposes. Its production in India is practically restricted to Bihar, U. P. and the Punjab.

§ 41. **Other Minerals:**—Other minerals of subordinate importance as regards the place they occupy in Indian mineral production are lead, tin, copper, zinc bauxite (aluminium) jade, chromite, potash, amber, diamond, rubies, sulphur etc.,

§ 42. **Salt:**—About three-fourths of the annual consumption of salt in India is produced in the country itself, the total consumption being above 2 million tons. About 60% of the Indian salt is obtained by evaporation of sea-water on the coasts of Bombay, Madras and Burma. Another source of salt is the Salt Range and the Kohat mines in the Punjab. In Kohat the salt resources are said to be practically inexhaustible. The other two sources are brine salt from the Sambhar lake in Rajputana and salt brine condensed on the border of the lesser Rann of Cutch.

§ 43. **Building stones:**—Amongst the most important of the building stones available in India are the sandstones which belong to the Vindhyan system of rocks and cover an immense area, from Dehri-on-Son to Hoshangabad and to Gwalior and from there to Agra and to Neemuch. Many of the great masterpieces of Indian art from the time of Asoka to the present day have been constructed out of this material. In the southern part of the Peninsula, various igneous rocks are largely used. Other kinds of building materials are slates and limestones in the centre of Southern India, basalt rock in C. P. and Central India etc., laterite which is widely distributed throughout India; the famous Porbunder stone much in use in Bombay and Karachi, the marble of the Jubblepore District and other parts of Central Provinces and many other varieties too numerous to be mentioned.

§ 44. **Cement-making materials:**—The chief raw materials required for making Cement are chalk or limestone and clay which are found extensively in India, for instance, near Lakheri (Bundy State, Rajputana) also at Kanji where limestones and clay of good quality are available. Other areas are Porbunder in Kathiawar, and the vicinity of Lucknow and Cawnpore in U. P. Portland Cements made in India are supposed to be equal to the best English brands. Altogether, the cement-making industry seems to have a promising future before it in India.

§ 45. **Lime:**—The principal source of lime is limestone which has already been referred to in connection with its other uses. Its

supply is practically unlimited though only those deposits are worked which are most conveniently situated for purposes of transport or for some other special local reason.

§ 46. Vegetable resources:—(i) The extensive area of the country, differences in elevation, the wide range of latitude, climate and soil make it possible for India to produce a large variety of vegetable products belonging to sub-tropical and temperate zones, as the following enumeration will show. (i) Food-grains:— Rice in Bengal, Bihar and Orissa, Burma and to some extent in Madras and Bombay; wheat in north-west parts of India; millets such as Jowar and Bajra in Bombay and Madras; barley in U.P., Bihar; Ragi in Madras, U.P. Bombay; maize in Bihar, Orissa U.P., Punjab; gram in Punjab, U.P., Bihar, and Orissa, C.P.; (ii) condiments and spices in Madras, Bombay, Bengal; sugarcane all over India, especially in U. P.; coffee in Madras and Coorg; tea in Assam and Bengal; (iii) oil-seeds such as linseed, sesamum, rape and mustard, groundnut, castor etc. in Madras, U. P., C. P., Bombay, Burma. (iv) Fibres:— Cotton in Bombay, Berar, Punjab and Madras; Jute in Bengal. (v) Miscellaneous:— Opium, in U. P.; tobacco in Bengal, Bihar, Bombay, Madras; fodder crops in Punjab, U. P.; cinchona in Southern India, Burma; India-rubber in Assam, Khasia Hills and Burma; and forest products.

A detailed survey of the principal crops of India along with the efforts made by the Agricultural Department to improve the quality and yield will be undertaken in our chapter on Indian Agriculture.

§ 47 (ii) Animal Resources:—There is hardly any need of emphasising the importance of animal life to an agricultural country like India. The variety of Indian conditions has naturally developed a great variety of animal life, and the number of animal species found in India is much greater than that in Europe. The cow and the buffalo are mainly prized as supplying milk. The bullock plays an important part in the agricultural economy both as a draft animal and on the field, the use of horses or mechanical power being practically unknown. Animals used in agricultural operations as well as goats and sheep contribute practically all the manure used by the Indian cultivator, the use of artificial manure

ing the electric supply was urgent. The next scheme known as the Andhra Valley Power scheme is designed to yield 100,000 H. P. in its full development. Yet another important project is being carried out under the name of the Nila-Mula scheme calculated to supply 150,000 H. P. Another gigantic Tata scheme is contemplated in the huge valley of the Koyna river. As a result of the completion of these schemes the handicap imposed upon Bombay by the absence of coal in its vicinity will be entirely removed. The substitution of electricity for steam will also considerably alleviate conditions as regards public health in Bombay.

In accordance with the recommendations of the Industrial Commission the Government of India undertook, in 1918, a comprehensive hydrographic survey of India. The results of the survey brought out various interesting possibilities in connection with the development of hydro-electric power; for example, it is estimated that the minimum flow of the seven great rivers eastwards from the Indus is capable of giving not less than three million horsepower for every thousand feet of fall from the Himalayas, while similar considerations apply to rivers in other parts.

It may be added here that the hydro-electric schemes will not only serve the purpose of supplying power to the industries but also of extending the irrigation facilities in India.

We may also look forward to a time when every village within a reasonable distance from a hydro-electric power station will receive its supply of electric current which will help the development of rural industries and increase the amenities of rural life.

§ 50. A poor people in a rich country:—The foregoing survey has disclosed the rich and varied character of the natural resources of India. It is a commonplace remark that while nature has showered her bounties on the country with a liberal hand, man in India has failed to profit adequately by them. The contrast between the bounties of nature and the poverty of man is striking. Hence the usual statement, which has almost become a proverb, that India is a rich country inhabited by the poor. And much of the discussion in connection with the treatment of the subject of Indian economics centres round the inquiry about the causes and the cure for this state of affairs.

CHAPTER III

POPULATION.

§ 1. **Total Population** :—The total population of India according to the latest Census (1921) is 318, 942, 480, British territory containing 247,003,293 persons or 77%, and the Indian States 71,939,187 persons, or 23 % of the total population. With an area of about half that of the United States India has a population almost three times as large.

§2 **Factors determining density** :—The density of the population (i. e. number supported per sq. mile) depends on the climatic conditions, security of life and property, standard of comfort, economic resources and the stage of economic development, in other words, on the external environment and the use of it made by man. If the economic resources are rich, obviously, other things being equal, a country will be able to support a higher density of population than if the resources are poor. Similarly, ceteris paribus, the more advanced the community, the greater its capacity for supporting a high population. A highly industrialised and well developed country will have the largest density, for example, England and Wales (654). A purely agricultural population will support a very much smaller population. The fact that India is a primarily agricultural country explains the low average density of her population.

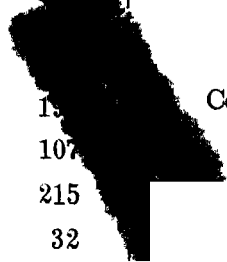
Again, a country in an earlier stage will support a smaller number per square mile than one in a later stage, and the hunting stage even less. In a purely agricultural country, density of population will

* " Natural elements such as drainage, altitude, configuration, rainfall, temperature, fertility of soil etc. are no doubt of basic importance in determining the distribution of population. But as civilisation advances the human factor plays an increasing by important part by transforming the environment. " (Seligman).

depend upon the character of cultivation. (See Seligman's Principles of Economics p. 49).

Density is thus the result of a great variety of factors. It must not be forgotten that mere numbers supported per square mile have small significance unless we also take into account the standard of comfort of the population in question. The density of Bengal (608), for instance, approaches that of Belgium or England and Wales. There is, however, no comparison between Bengal and either of the two countries mentioned as regards standard of well-being. The high density in the case of Bengal can only signify great poverty, because Bengal is predominantly an agricultural province and it is estimated that agriculture under the best conditions cannot maintain more than 250 persons per square mile at a reasonable level comfort.

§ 3. Density and prosperity:—The average density over the whole of India is 177 per. sq. mile, the mean density in British India being 226 and in the native states 191. For purposes of comparison, figures for the average density in some other countries are given in the following table:—

Belgium	654	}	Census Report, 1921. p. 5	
 Wales	649			
	184			
Germany				
The Netherlands				
Austria	13			
Spain	107			
Japan	215			
United States	32			
New Zealand	11·8			
Egypt	34			

A glance at the above table makes it clear that we cannot draw any inferences about its economic position from the consideration of the average density of a country. For example, the United States and Egypt both show almost equal density, but the United States are

incomparably the richer of the two. On the other hand, there is a great difference as regards density between the United States on the one hand and England and Wales on the other, which, however, does not prevent the two countries from being on a par as regards their economic position. The fact is that the case of every country must be considered on its own merits in the matter of connecting the density of the population with the economic welfare of the people.

The figure for the average density of India hides the great differences in the provincial distribution of the population as revealed by the following table.

Area and Population of British India. (Census of 1921).

Provinces	Area in square miles.	Persons.	Density per square mile.
Madras	142,260	42,318,985	297
Bombay	123,621	19,348,219	157
Bengal	76,843	46,696,536	608
U. P.	106,295	45,375,787	427
Punjab	99,846	20,685,024	207
Burma	233,707	13,212,192	57
Bihar and Orissa	83,161	32,627,424	409
C. P. & Berar	99,876	13,912,760	139
Assam	53,015	7,606,230	143
N. W. F. Province	13,419	2,251,340	168
Baluchistan	54,228	420,648	8
Ajmer-Merwara	2,711	495,271	183
Coorg	1,582	163,838	104
Delhi	593	488,188	823
Andamans & Nicobars	3,143	27,086	
Total British territory			196 B. India.
	1,094,300	247,003,293	113 Indian St. (Average den.)

It is easy to explain these disparities by differences as regards fertility, physical configuration, climate, and special conditions. Extensive plains with vast stretches of fertile land and adequate rainfall are obviously conducive to high density as in the case of Bengal and U. P. The fact that conditions are not so favourable

in these respects explains the relatively lower density of Bombay. Burma, containing as it does, a large forest area is comparatively sparsely populated though, even as it is, it is considerably under-peopled. The inter-provincial disparities in regard to density are also due in some measure to the stay-at-home habits of the people and other difficulties in the way of free internal migration. The case of Delhi stands by itself as the large urban population of the city of Delhi contributes the major part of the total population of the province.

§ 4. Distribution of the population according to religion :—

		% of the total Population	Percentage of variation.	
			Increase(+) or Decrease (-)	
Hindus	216,734,586	68.56		
Sikhs	3,238,803	1.03	+ 7.4	+ 37.3
Jains	1,178,596	.37	- 5.6	- 6.4
Buddhists	11,571,268	3.66	+ 7.9	+ 13.1
Parsis	101,778	.03	+ 1.7	+ 6.3
Mohammedans	68,735,233	21.74	- 3.1	+ 6.7
Christians	4,754,064	1.51	+ 22.7	+ 32.6
Jews	21,778	.01	+ 3.8	+ 15.1
Animists	9,774,611	3.09	- 5.1	+ 19.9
Minor Religions not returned	18004	.01	-51.05	-7 1.04
* Grand total	316,128,721	100.00	- 0.8	- 6.05

Hindus largely outnumber other communities in the centre and south of India, more especially in the Madras Presidency where they are no less than 89% of the population. Other provinces where the Hindus are in the majority are Assam, Bihar and Orissa, the United Provinces, the Central India tract, Rajputana and Bombay. The population of N. W. F. Province, Baluchistan and Kashmir is almost exclu-

* The total population shown in table falls short of that given above owing to the omission of 2,70,666 persons in the N. W. F. Province and 43,093 persons in certain tracts in Burma who were not enumerated by religion.

sively Mahommedan and is predominantly Mahommedan in the Punjab and Eastern Bengal and Sind. The Buddhists are almost entirely confined to Burma contributing 85 % of its population. The Sikhs are similarly confined to the Punjab and the Jains practically in Rajputana, Ajmer-Merwara and neighbouring states. Those who are classed as Animists (following tribal religions) are principally to be found in Bihar and Orissa, the C.P. and Assam, though a fairly large number were also returned in Bengal, Burma, Madras, Rajputana, Central India and Hyderabad. More than 3/5ths of the total number of Christians reside in South India. The Parsees and Jews belong primarily to the Bombay Presidency. (See Indian Year Book 1927 p. 20-21.)

§ 5. Disiribution of population according to occupation :—

The manner in which the population of a country is distributed amongst the different occupations is an index of the stage reached by it in economic development.

(For the distribution of the Indian population according to occupation see table on page 46.)

The following table gives an idea of the number of actual workers and their dependants (Census of 1921) in thousands.

Occupation.	Actual workers.		Dependants. both sexes.
	Males	Females	
A Production of raw materials	72,334	33,701	125,158
B Preparation and supply of material substances.	18,027	7,717	29,867
C Public Administration and liberal arts.	3,663	451	5,730
D Miscellaneous	6,583	3,933	8,884
Total	100,609	45,803	169,641

It will be seen from this table that almost 75 % of the people obtain their livelihood from agriculture and allied occupations

The following table gives the distribution of the Indian population according to occupation in 1911 and 1921*—

Population in thousands.

	1921		1911		Variation percent.
	Population sup- ported by (i)	Percentage of total population (ii)	Population sup- ported by (i)	Percentage of total population (ii)	
Total Population	316,055		313,470	21	+8
A Production of raw materials	231,194	73.15	227,080	72.44	+1.8
I Exploitation of animals and vegetation (Including pasture and agriculture fishing and hunting).	230,652	72.98	226,550	72.27	+1.8
II Exploitation of minerals	542	.17	529	.17	+2.3
B Preparation and supply of material substances	55,612	17.59	58,106	18.56	-4.3
III Industry	33,167	10.49	35,320	11.27	-6.0
IV Transport	4,331	1.37	5,028	1.60	-13.8
V Trade	18,114	5.73	17,756	5.69	+2.0
C Public Administration and liberal arts	9,846	3.12	10,456	3.48	-5.1
VI Public force	2,181	.69	2,393	.77	-9.0
VII Public Administration	2,643	.84	2,648	.84	-1
VIII Professions and liberal arts	5,020	1.59	5,409	1.70	-7.1
D Miscellaneous	19,402	6.14	17,826	5.52	+8.8
IX Persons living principally on their income	479	.15	540	.17	-11.1
X Domestic service	4,570	1.44	4,599	1.47	-.6
XI Insufficiently described occupations	11,098	3.51	9,236	2.95	30.1
XII Unproductive	3,253	1.04	3,451	1.10	-5.7

* See Statistical Abstract for British India 1924-25, pp. 36-37 and Census Report (1921)

"Agriculture proper supports 224 millions of persons or 71 per cent of the population. If we add the pastoral and hunting occupations the percentage rises to 73 while a considerable proportion of the unfortunately large number of persons in the category of vague and unclassifiable occupations are probably labourers closely connected with the occupation of the land. Industries support 10 per cent. of the population, but the bulk of these are engaged in unorganised industries connected with the supply of personal and household necessities and the simple implements of work. Organised industries occupy only 1 per cent. of the people. In trade and transport, on which less than 6 per cent. and 2 per cent respectively depend, not an inconsiderable number are connected with the disposal of the various kinds of agricultural products. The administration and protection of the country engages only 4,825,479 persons, or $1\frac{1}{2}$ per cent. of the population, and the remainder are supported by domestic, miscellaneous and unproductive occupations. Though the extent to which agriculture predominates in individual provinces varies there is no region in which it does not in some form easily take the first place. In spite of the trade of Calcutta and the numerous industrial and mining concerns of Bengal and Bihar and Orissa the population of the eastern provinces is overwhelmingly agricultural and contains a higher percentage of persons supported by the land than any other tract of India. Of industrial workers the largest proportions in the local population are in the Punjab, the United Provinces and Bombay. Of these three provinces, however, agriculture dominates the economic life of the first two, where the industrial occupations, though they engage a substantial number of persons, are mostly of the cottage industry type. In Bombay the development of organized industry is of some economic importance but is at present largely confined to a few of the biggest cities. In the category of unclassified occupations the majority of persons are labourers whose particular form of labour is unspecified and the rest mostly unspecified clerks. (Census Report 1921)

Amongst the civilised countries of the world India has the highest percentage of people dependent on agriculture and the lowest percentage of those employed in the Industries, Trade, Transport etc., a fact which will be brought out in following table:—

* Percentage of total population supported by :—

Country Year of Census	Exploitation of animals & vegetables	Mining & Industry	Trade and Transport
Germany 1907	28.6	42.2	13.4
Austria 1910	48.4	26.5	12.4
Italy 1911	34.2	16.9	5.0
Spain 1910	21.1	5.2	1.5
France§ 1911	40.7	35.8	9.8
Netherlands 1909	10.9	13.5	7.5
Denmark 1911	36.4	27.3	16.6
Switzerland 1910	27.7	42.7	16.4
Great Britain and Ireland workers only 1911	11.6	56.8	13.1
U. States			
Workers above ten 1920	26.3	33.4	17.6
India 1921	72.9	10.6	7.1

§ Figures refer to workers only.

Successive censuses at least from 1891 to 1921 show the tendency towards dependence on agriculture to be steadily on the increase.† Whereas in India the industries are losing to agriculture, the tendency in most of the Western countries has been precisely in the opposite direction. This is to be deplored on various accounts. In the first place, *The economics of a country dependent, to so great an extent as India, on agriculture, must be unstable.* Dependence on agriculture means dependence on rains and if the rains fail there is necessarily wide-spread distress involving the majority of the people. This will not be the case if a considerable section of the people cease to be directly dependent on agriculture. The Famine Commission of 1880 correctly diagnose the situation when they say that "At the root of much of the poverty of the people of India and of the risks to which they are exposed,..... lies the unfortunate circumstance that agriculture forms almost the sole occupation of the masses of the population" and by way of prescription to remedy this state of affairs

* See Brij Narain : Population of India p. 92.

† The proportion to the total population of those dependent on agriculture rose from 61 percent in 1891 to 66 percent in 1901, 71 percent in 1911 and 72.8 percent in 1921.

they recommended the development of manufacturing industries. The present excessively uneven vocational distribution of the population constitutes a serious economic menace to the country and is responsible for many of the social and economic ills from which it is suffering. A more even distribution of the population amongst the various occupations through an all-round development of the economic resources of the country is an imperative need towards the fulfilment of which national policy must be vigorously directed.

§ 5. Population in towns and villages:—The preponderant position of agriculture is further reflected in the distribution of the population between urban and rural areas as the occupations of the people determine their habitat. The following table shows the distribution of the Indian population between towns and villages.

Towns and villages classified by population (Census of 1921).

	No.	Population in millions.
Under 500 inhabitants	5,17,036	95.98
500 to 1,000	1,05,017	73.00
1,000 to 2,000	47,272	64.29
2,000 to 5,000	15,965	45.08
5,000 to 10,000	1,871	12.42
10,000 to 20,000	517	6.99
20,000 to 50,000	198	5.86
50,000 to 1,00,000	55	3.60
1,00,000 and over	34	8.05
Encampment, boat and railway population unclassified		.69
Area in which village statistics were not recorded	46	2.9
Total	6,88,868	

According to the Census definition, a town generally means every continuous collection of houses permanently inhabited by not less than 5000 people.*

* A town also includes every municipality of whatever size, all Civil Lines not included within Municipal limits and every cantonment,

All other places are classed as villages. According to this definition, while we have a total number of 2,675 towns, the total number of villages is 6,85,260 which shows a very great preponderance of villages over towns. Contrast with this the position in Western Europe. While India has a bare ten per cent of the population in towns England has 78%, U. S. A. 52%, France 43% and Germany 46% (Brij Narain: Population p. 67) Urbanisation is proceeding at a snail's pace in India. Between 1891 and 1921 there was less than 1% increase in the town population, as shown by the following table:—

Per cent of Total Population. (See Census Report Vol. I, p. 65.)

	1921	1911	1901	1891
Total Population	100	100	100	100
Urban territory	10·2	9·5	9·9	9·5
Towns having—				
100,000 and over	2·6	2·2	2·2	2·2
50,000 to 1,00,000	1·1	1·0	1·2	1·1
20,000 to 50,000	1·8	1·8	1·7	1·6
10,000 to 20,000	2·0	2·0	2·2	1·9
5,000 to 10,000	2·0	1·9	2·0	2·1
Under 5,000	·7	·6	·6	·6
*Rural territory	89·8	90·5	90·1	93·5

Another noteworthy fact is that the growth of commerce and industry is leading to a comparatively rapid increase of cities which are gaining at the expense not of the villages but of the middle-sized towns—a tendency especially marked in Western India. Between 1911 and 1921, the towns with populations of above 50,000 have increased by more than 16 per cent; the increase has been [redacted] between 5,000 and 50,000, while the population in 10 to 20 thousand has not increased [redacted] the general population of the country. (Census Report 1921 Vol. I, p. 66). The Industrial Revolution in the West on the other hand, resulted in a rapid growth of towns which drew upon the country-side and not on the smaller towns for the increased supply of their population—a tendency reinforced by the Enclosure Movement which resulted in the dispossession of the yeomen. In most of the Western countries the 19th century

nessed a great development of organised industries resulting in a phenomenally rapid growth of the town population standing in marked contrast with the almost stationary character of the urban population in India.* The overwhelming increase in the urban population in England as a result of the Industrial Revolution is too well-known a fact to be dwelt upon at length here. The different character of the Indian evolution and its causes are matters which are reserved for detailed discussion in our chapter on the Economic Transition in India.

The present excessively uneven distribution between city and country, with only a negligible proportion of the people living in cities is an index of the economic backwardness of the population. Ranade commenting on the progressive ruralisation (for he was writing at a time when the slight reverse movement towards urbanisation was not yet in evidence) pointed out that it meant loss of power, intelligence and self-dependence. Civilisation and progress have always originated in cities from which they have radiated into the country-side which, left to itself, has seldom displayed the capacity for progressive development. The present distribution of the population between city and country in India could be radically altered in favour of towns, only by the development of industries, trade and transport. We must not, indeed, overlook the perils associated with vast aggregations of population into a few mammoth cities like, London, New York, Bombay and Calcutta, but the rise of medium-sized towns scattered all over the country would afford all the economies of large-scale production and the amenities of town-life, while avoiding the dangers to moral and physical health associated with modern slums.

§ 6. Population according to sex:—The sex-composition of the population has certain important aspects. "The percentage of females affects the labour market to the extent that women are wage-earners, while a considerable predominance of either sex not only influences marriage and fecundity but exerts some effect on social life in general." (Seligman: Principles of Economics, p. 54). According to the Census of 1921, the number of males in

*In 1890, about 90 per cent of the German people lived in villages and only 10 per cent in towns, whereas the respective figures today are 51 and 46. In Austria, 91 per cent of the population was rural and only 9 per cent urban in 1845; in 1910 the proportions were 74.8 and 27.2 (Brij Narain: p p. 69-70)

India was 163,995,554 and that of females was 154,946,926 giving a proportion of 945 females to every 1000 males. Prof. Brij Narain gives the following table showing the sex composition of the Indian population at different ages and comparing India in this respect with some other countries:—

Number of females per 1000 males in various countries.

Country	Year	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70 & more
Germany	1910	989	995	1,001	1,004	1,033	1,112	1,219	1,314
Austria	1910	989	1,023	1,043	1,049	1,087	1,071	1,118	1,199
Italy	1911	963	1,017	1,121	1,108	1,057	1,031	1,028	1,038
Hungary	1910	990	1,012	1,059	1,051	1,015	993	1,017	1,061
France	1911	989	994	1,021	1,008	1,026	1,059	1,155	1,300
England and Wales	1911	996	1,009	1,114	1,082	1,078	1,093	1,167	1,416
U. S. A.	1910	979	990	953	903	884	859	925	1,023
Japan	1913	976	968	967	969	949	972	1,042	1,210
India	1911	992	874	1,024	910	912	950	1,092	60
"	1921	998	869	1,022	905	902	926	1,049	and more

This table reveals certain interesting facts. It shows that in the youngest group (0-10) there is a deficiency of females as compared to males in all countries.* But as we travel up the age-

* While the deficiency of females at birth is a universal phenomenon this disparity is seen to be corrected in European countries by the higher rate of infant mortality in the case of males than in the case of females. The disproportion of females to male children in India, however has sometimes been regarded as a sign that the practice of female infanticide has not yet been completely stamped out. This practice is supposed to be prevalent not only among the degraded races but also to some extent amongst respected and reputed communities like the Jats, Khatrias, Gujars, Rajputs, etc. (See Census Report, Vol. I, Appendix VI)

scale Indian conditions begin to show a divergence as regards the proportion of females to males and the general conclusion emerges that conditions in India are distinctly unfavourable to female life in contrast with European conditions. But in India, after the period of adolescence is reached the death rate amongst females shows an excess over that of males contrary to European experience. An explanation is afforded by the existence of certain social practices such as that of the Purdah, which is especially disastrous in its effects on the health of women residing in crowded towns and which is found amongst comparatively well-to-do Mahomedans and also amongst Hindus in those parts of the country where Mahomedan influence has been strongly at work. But the most important cause of excessive female mortality is the prevalence of early marriages which subjects girls to the risks of motherhood at an age when they have not yet reached full physical maturity. As the Census Superintendent, Baroda, (1901) observes, numbers of child wives " march from the nuptial bed to the funeral pile. Nervous debility, consumption, and uterine diseases create havoc among them." Another cause is that in India female life is held cheaper than in the West not only by men but by the women themselves and this results in a deliberate neglect of health in the case of females. Still another cause is the fact that women workers in field or factory are seldom in a position to enjoy the necessary period of rest before and after delivery and the strain of overwork inevitably impaires their physique. The unskilful midwifery of the village *Dai* is a further contributory cause. What is particularly alarming about the situation is the fact that the proportion of females to males shows a definite progressive diminution from Census to Census. (This stands out clearly from the table given in the footnote ' on the next page.)

Another peculiarity of sex-distribution in India is that the deficiency of the females in the general population is further greatly accentuated in the population of the towns in contrast with the exactly opposite conditions which prevail in Western Countries where females are largely in excess of males in the towns. This is accounted for by the character of the factory hands who seldom bring their families to the towns and secondly by the

relatively very much smaller employment of women in town industries. The number of women per 1000 males in 1921 was as follows in some of the principal towns:—

Calcutta	500	Delhi	672	Nagpore	864
Bombay	524	Rangoon	444	Lucknow	774
Madras	908	Poona	813	Dacca	774
Ahmedabad	763	Lahore	571	Patna	824
Cawnpore	667	Karachi	629	Allahabad	753

See Statistical Abstract for British India 1924-25, p. 10

*Footnote for page 53.

	Female deaths per 1,000 male deaths. Average for decade ending.		
	1901	1911	1921
Bengal	874	895	909
Bihar and Orissa	870	940	936
Bombay	901	936	957
Burma	817	849	901
C. P. and Berar	853	917	923
Madras	951	961	979
Punjab	918	983	928
U. P.	891	957	918

It need scarcely be pointed out that this shortage of females in the towns adversely affects the health, comfort and the morals of the workers.

The percentage of female workers to the total number of females in India and some other countries is as follows :—

India	1921	29·8	France	1906	38·9
Germany	1907	30·4	England and		
Hungary	1910	22·5	and Wales	1911	25·9
Spain	1910	9·9	U. S. A.	1910	18·1

The proportion of female workers to the total female population in India thus compares favourably with most of the other countries mentioned above. This is rather surprising and may be taken to indicate that the Purdah affects only a negligible proportion of woman. It also throws a side-light on Indian poverty because in India an improvement in earning capacity is generally followed by a withdrawal of the women-folk from the ranks of workers. Prevalent ideas of respectability enjoin that the women of the household shall if possible not go out for work. The large proportion of women workers, therefore, indicates that very few people in the country can afford the luxury of idleness for their women. Their work is turned to account, although with reluctance, for adding, however little, to the family income.*

(Brij Narain p. 87).

* For Census purposes even a woman who is primarily occupied in domestic duties and gives only a fraction of her time to a remunerated occupation is counted as a worker. While it seems to be perfectly legitimate to ground the inference as regards poverty on the fact that a large number of women are compelled to seek employment outside their homes in spite of the existence of strong social prejudices operating against such a course, this does not affect the validity of the usual contention that the total *quantity* of female labour is very small in India relatively to Western countries. Custom and prejudice keep many occupations closed against women in India, which involves a large waste of female labour and makes the size of the national dividend smaller than it need be. The number of women workers is large but most of them being part time and casual workers the amount contributed by them to the total of paid labour is negligible in comparison with that of the male workers. Also the number of occupations closed to women is greater than in the progressive countries of the West.

§ 7. Distribution according to age:—The principal economic significance of the age-composition of a population is the proportion of workers (effective population) to the total population. The age-distribution of the population of every country can be exhibited in the form of a pyramid. The smaller age-groups which represent the largest proportion of the population would obviously form the base of the pyramid which will narrow down as the higher age-groups are reached until it will finally taper to a point because after a certain age there will be no persons living to record. The shape of the pyramid will differ according to the relative proportions between the different age-groups in the total population. In the case of India, the age-pyramid has the broadest base of all countries owing to the very high birth rate. India has the largest proportion of children under ten. The pyramid also tapers towards a point more sharply in the case of India than in the case of any other country indicating the inferior longevity of the Indian population. There are relatively very few people in India alive beyond the age of fifty, as is shown by the following table:—

Age-distribution per 1,000 of the population.

Age.	Ger-	France	Eng-	U.S. A. Japan		British India	
	many		land & Wales				
Under 10	1910 234	1911 171	1911 209	1910 222	1913 244	1911 276	1921 274
10-20	203	166	190	198	198	192	198
P 20-30	164	158	173	187	154	178	170
F 30-40	139	148	152	146	138	142	143
40-50	105	127	115	106	101	99	94
50-60	76	104	80	72	77	61	61
60-70	51	77	51	43	57	36	36
70 and more	23	49	30	26*	31	16	17

* Includes 2 of unknown age (See Brij Narain, op. cit pp. 27-28.)

It will be seen from the above table that the difference between the numbers in group 1 and group 2 is the largest in India showing the enormous rate of infant mortality in this country. Similarly the last three groups i. e. those representing the ages of 50 and above show the smallest number of persons in India.

The commonly accepted limits for the productive or the working population are between the ages of 15 and 60 or 65 in Europe. In India on the other hand, the upper limit has necessarily to be smaller because old age and incapacity for work set in much more quickly than in Europe. The age-limits accepted in India are 15-40. The effective or working population of India in this sense is only 40 % of the total population. In France it is 53 % and in England 60 %, taking for these two countries the limits of 15-60 for the productive population. From the point of view of the labour-strength available, the position in India thus gives cause for dissatisfaction. Any steps calculated to improve the standard of public health and increase the longevity of the people so as to increase the volume of the working population and to bring it into line with that of other countries should be welcome.

It need hardly be pointed out that the age-distribution in the same country may vary from time to time. There may be, for example, changes in the normal birth and death rate. Again, war, famine and epidemic diseases may alter the age-distribution. A war would reduce the proportion of the adult population. The incidence of famine and epidemics is different on the different age-groups. Famine affects children more severely than adults whereas epidemics have the reverse effect †. Over a sufficiently long period it is obvious that excessive mortality amongst children will be reflected in a smaller number of adults some fifteen years afterwards. Similarly, if a large number of adults are carried off by disease during the reproductive period of life, this will in course of time result in a reduced birth-rate and consequently a smaller number of children. Owing to the heavy mortality caused by the

*See Wadia and Joshi : Wealth of India p. 60.

†See Brij Narain : Population problem in India.

Influenza epidemic of 1918 in India, while all sections of the people suffered more or less, the mortality was probably heavier amongst the adults and consequently the proportion of the working population to the total population is more than normally unfavourable at the present moment.

*The following table shows the distribution of the population according to age and sex (Census of 1921):—

In millions.

Age	Total Population			Age	Total Population		
	Pers.	Males	Female		Pers.	Males	females
0-5	39·65	19·48	20·17	35-40	18·26	10·30	8·66
5-10	46·74	23·84	22·90	40-45	19·58	10·07	9·51
10-15	36·74	20·17	16·57	45-50	11·64	6·34	5·29
15-20	26·14	13·64	12·49	50-55	13·74	7·03	6·70
20-25	26·06	12·56	13·50	55-60	5·57	2·99	2·58
25-30	37·59	14·02	13·57	60-65	8·88	4·31	4·57
30-35	26·13	13·37	12·76	65-70	2·51	1·30	1·21
				70 & over	5·34	2·58	2·76
	§ Age unspecified -				§24	§24	
	Total -				315·35	162·08	153·26

§ Not in millions.

§ 8. The Indian birth and death rates:—The size of the Indian population is determined almost exclusively by the birth-rate and the death-rate, both emigration and immigration being negligible factors. As regards both birth-rate and death-rate India occupies a position of unenviable pre-eminence amongst the civilised

*Statistical Abstract 1924-25.

countries of the world. The average birth and death rates for India from the figures for the different provinces in 1911 were 43·2 and 38·5 respectively, so that the birth-rate is not very far from the maximum of 45 per 1000 and the death-rate is more than two and a half times the minimum of 15 per 1,000 laid down by economists for a normal population (See Taussing: Principles of Economics). In the European countries the tendency towards a progressive diminution both of the birth rate and the death rate has been strongly in operation for a long time as will be seen from the following table,* relating to England and Wales but typical of Western European countries :—

Period Average	Births per	Deaths 1,000	Period Average	Births per	Deaths 1,000
1851-55	39·9	22·7	1901-1905	28·2	16·0
1871-75	35·5	22·0	1906-1910	26·3	14·7
1891-95	30·5	18·7	1911-1915	23·6	14·3
1896-1900	29·3	17·7	1919	18·5	14·0
			1924	18·8	12·2
			1925	18·3	12·2
			1926	17·8	11·6

In India no such striking diminution of birth and death-rates has occurred. On the contrary during certain periods an actual increase in both is visible as will be seen from the following table:—†

*See Nation and Athenaeum, January 29, 1927.

† The Statistics for the year 1885 to 1920 have been taken from Brij Narain, and the rest from the Statistical Abstract for British India 1924-25

Period	Ratio of Births per 1,000	Ratio of Deaths per 1,000
1885-90	35.83	27.44
1891-1900	35.43	31.31
1901-1910	38.18	33.94
1911-17	38.68	30.31
1918	35.35	62.46
1919	30.24	35.87
1920	32.98	30.84
{ Average of 1911-1920	36.93	34.13
1921	32.20	30.59
1922	31.85	24.02
1923	35.06	25.00
1924	34.44	28.49

The main reason for the higher birth-rate in India is the practical universality of marriage. The following statistics regarding the civil condition of the people in India show the very high percentage of married persons. In 1921, the total population was 315,350,442 out of which 80,685,182 males and 54,841,195 females were unmarried and 71,057,754 males and 71,593,131 females were married. In the same year 10,338,392 males and 26,834,838 females were widowed.*

In India amongst the males only 498 per 1,000 are unmarried and amongst the females only 358 per 1,000 in the general population. This is the lowest proportion of unmarried for both sexes of all countries. At the age of twenty 298 per 1,000 of males and

* See Statistical Abstract for 1924-25, also table which appears at footnote † on next page.

771 of females are married. A very high proportion of males are married by 30 and practically every female by 20. Child-marriages are common, the age of marriage being somewhat higher for boys than for girls. Religion enjoins on the Hindu that he "must marry and beget children—sons if you please—to perform his funeral rites lest his spirit should wander uneasily in the vacant places of the earth"*

The universality of marriage is to a certain extent offset so far as its effect on the size of the population goes, by the fact that widow remarriage is rare amongst the Hindus, although in recent years there has been some weakening of the prejudice against it. The custom of early marriage also is unfavourable to fecundity as it often has a highly injurious effect on the health of the girl-wives resulting in constitutional break-down or premature death. To a smaller extent than in the case of women, early marriages must

* Wattal : Population in India p. 3.

† (Per 1,000 of each sex. (Census of 1921).

	Unmarried	Married	Widowed		Unmarried	Married	Widowed
Males (Average)	498	438	64	Females	358	467	175
0—5	994	6	--	0—5	988	11	1
5—10	966	32	2	5—10	907	88	5
10—15	879	116	5	10—15	601	382	17
15—20	687	298	15	15—20	188	771	41
20—30	292	663	45	20—30	38	870	92
30—40	83	835	82	30—40	17	769	214
40—60	44	797	159	40—60	13	493	494
60 and over	37	641	322	60 and over	12	174	814

have a prejudicial effect on the physical vigour of the stronger sex as well. A further counteracting factor is the prevalence of malaria which by affecting men and women and especially women at the reproductive ages tends to bring down the birth-rate. The practice of prolonged lactation also reduces conceptivity. In spite of the operation of these various forces tending to check population the figure for the Indian birth-rate is the highest in the world as we have already remarked.

§ 9. Death-rate:—A high and unchecked birth-rate is usually associated with a high death-rate unless there are practically limitless opportunities for the increase of the population and this fact is abundantly exemplified by the Indian death-rate. The high death-rate is in the last resort due to general poverty which makes the people peculiarly non-resistant to diseases like malaria, plague and influenza. The low vitality of the Indian people explains the fact that at most ages the expectation of life is lower than in the European countries, as can be gathered from the following table:—*

Countries	Males					
	At birth	10	20	30	60	80
India	22.59	33.36	27.46	22.45	10.00	3.06
Germany	47.41	52.01	43.43	35.29	13.18	4.41
Denmark	54.90	55.10	46.30	38.00	15.20	5.10
England & Wales	51.50	53.08	44.21	35.81	13.78	4.96
France	45.74	49.75	41.53	34.35	13.81	4.87
Countries	Females					
	At birth	10	20	30	60	80
India	23.31	33.74	27.96	22.99	10.11	3.06
Germany	50.68	53.99	45.35	37.30	14.17	4.52
Denmark	57.90	56.70	48.00	40.10	16.50	5.50
England & Wales	55.35	55.91	47.10	38.54	15.48	5.49
France	49.13	52.03	44.02	36.93	15.08	5.38

* Brij Narain op. cit. p. 34

The expectation of life in European countries has been showing a decided increase owing to better conditions of life and greater control over the preventible causes of death, whereas in India economically speaking the country has been practically at a standstill and the improvement noted in the case of European countries has failed to appear. In fact, it is possible to make out a plausible case to show that a positive deterioration has set in. The shortness of the average expectation of life in India means that men who have gathered experience and wisdom are snatched away when their power to be of service to the community is at its highest.

The two outstanding features about the death-rate in India are the high infantile mortality and the high female mortality at reproductive ages. The infantile mortality is higher in India than in any of the civilised countries. About one-fifth of the children born die before they reach the age of one year and the infant death-rate amounts to one-fifth of the total death-rate for all ages. Owing to the highly insanitary conditions prevailing in the bigger cities in India infant mortality is especially heavy there, for instance, in Bombay it is 556 per 1,000 as against something like 60 in London. There was a time when in European countries infantile mortality was as high as in India today, but in the course of the nineteenth century a most remarkable decline has been achieved. The following table relating to England and

Period	Deaths under one year per 1,000 births	Period	Deaths etc.
1850-55	156	1911-1915	110
1870-75	153	1916-	89
1891-95	151	1924	75
1896-1900	156	1925	75
1902-1905	138	1926	70
1906-1910	117		

* See the Nation and Athenaeum Jan. 29, 1927.

The following figures for infant mortality in India afford a painful contrast* :—

Year	Deaths under one year per mille of births		Year	Deaths under one year per mile of births	
	Males	Females		Males	Females
1911	214	196	1916	209	195
1912	216	199	1917	212	198
1913	193	197	1918	274	260
1914	219	204	1919	228	220
1915	208	195	1920	201	188

Comment is needless. The slaughter of innocents is going on on a vast scale and shows no signs of appreciable abatement, at all comparable to the decline that has taken place in Western Europe.

A part of this heavy infant mortality is attributable to the custom of early weaning which impairs the vitality of the infant as well as to the use of opium. Drugging the child with opium when the mother is free for work and also the growing difficulty of securing a plentiful supply of good milk-factors which are present in an especially acute form in large towns though by no means altogether absent in the villages—are important contributory causes of this heavy mortality. Overtopping all these causes and largely explaining them is the influence of the grinding poverty of the masses.

The second peculiarity in connection with the Indian death-rate is the excessive mortality amongst women of child-bearing age. As we have already analysed the causes of this phenomenon there is no need of further comment on it.

§ 9. ‡Growth of Population :—The actual increase in the Indian population has been very slow from decade to decade when we

* See Brij Narain : Population p. 25,

‡ Read Census Report Vol, I, p.7.

consider the period of the [redacted] years or so, for which Census statistics are available, the [redacted] being that although the birth-rate is high the death rate has almost kept pace with it. The survival rate in India therefore, is lower than in Europe where although the birth-rate is much lower, the death-rate is still lower. Between 1872 and 1921 population in India increased only by 20 % per cent. The population was 315,156,396 in 1911 and increased to 318,942,480 which gives a percentage of 1.2. The wide-spread failure of the rains in 1918 together with the havoc wrought by the great Influenza epidemic which "wiped out in a few months practically the whole natural increase in the population for the previous seven years" was responsible for the exceptionally low rate of increase during 1911-21. The total number of deaths due to Influenza has been estimated at between 12 and 13 millions (Census Report 1921 Vol. I, P. 14). The following table shows the irregular movement of the population from decade to decade :-

Nominal increase		Variation percentage since last Census
Census of	Population in millions	
1872	206.16	
1881	253.89	+ 23.2
1891	287.31	+ 13.2
1901	294.36	+ 2.5
1911	315.15	+ 7.1
1921	318.94	+ 1.2

The real increase, however, can be arrived at after making allowance for the increase of area and population enumerated at each census and for the fact that the methods of taking the census have become progressively more and more accurate. After making

due allowance for these factors [redacted] at the following result representing the real increase. ([redacted] report, 1921. Vol I, p. 7.)

Increase due to

Period.	Inclusion of new areas Millions.	Improvement of method Millions.	Real increase of population Millions.	Total Millions.	Rate per cent of real increase.
1872-81	33.0	12.0	3.0	48.0	1.5
1818-91	5.7	3.5	24.3	33.5	9.6
1891-01	2.7	.2	4.1	7.0	1.4
1901-11	1.8		18.7	20.5	6.4
1911-21	.1		3.7	3.8	1.2
Total	43.3	15.7	53.8	112.8	20.1

The following figures show how rapid the increase of population has been in Europe during the last 100 years or so:—*

Population of Europe in Millions.

Year		Year		
1800	188	1870	305	Russia not included
1810	198	1880	332	
1820	213	1890	363	
1830	234	1900	401	
1840	251	1905	420	
1850	266	1910	448	
1860	283			

* Grundriss der Sozialökonomik, II Abteilung, I Teil, *Wirtschaft und Natur*, p. 79 (Tübingen 1923)

The periods showing an abnormally small rate of increase in India are marked by the appearance of special calamities like famines and plague cutting off the natural increase to a very large extent. Thus there was a severe famine in South India during 1876-78. And during 1890-1900 both plague and famine joined hands to check the increase.

The period of 1901 to 1911 is described as one "of moderate agricultural prosperity" and population would have increased very substantially had it not been for the appearance of plague and of malaria in an epidemic form which carried off large numbers in the Punjab and U. P. The decade of 1881 to 1891 was the only period which escaped from any exceptional disaster and for this reason the rate of 9.6 per cent must be regarded as abnormal and some deductions must be made, if we wish to arrive at the normal increase of the population. For by normal increase we mean an increase that would result if conditions are neither exceptionally favourable nor exceptionally unfavourable. In the words of the Census Commissioner for 1921, "It is perhaps not an unreasonable estimate to place the probable natural increment in India at the present stage of development, and apart from exceptional calamities, at between 7 and 8 per cent in the decade."*

As mentioned above the survival rate in India has been very low compared to that in some of the Western countries as will be seen from the following tables:—

‡ (i) Percentage of increase of Population between 1870 & 1910.

India	18.9	Spain	22.0	England and	
Germany	19.0	France	6.6	Wales	58.2
Austria	39.0	Belgium	47.8	Russia	73.9
Hungary	33.7	Netherlands	62.0	Rumania	44.7
Italy	30.0	Denmark	53.2	Europe	45.4

* Census Report 1921, p. 48.

‡ Brij Narain, op. cit. p. 11.

(ii) Rate of natural annual increase per 1,000 of the population.

Country	1921	1922	1923	1924
U. S. A.		10.6	10.0	10.8
Germany	11.3	8.5	7.0	8.2
Hungary	8.9	8.6	9.2	
Austria	6.0	5.5	7.0	
Holland	16.3	14.5	16.1	15.3
Belgium	8.2	6.5	7.4	7.1
England and Wales	10.3	7.7	8.1	6.6

Japan increased between 1921 and 1923 from 56 millions to 60 millions with an annual increase of 13 per mille. While the Japanese birth-rate has been increasing slightly the death-rate has remained constant so that the natural increase may be expected to be even higher than hitherto.*

§ 10. Problem of Overpopulation: Controversy in Europe and India:—We shall now enter upon the discussion of the question whether India is overpopulated.

As will be seen presently, the low actual increase in the Indian population by no means proves that there can be no question of overpopulation in India.

The common notion that the population of the world has been continuously and steadily increasing ever since the dawn of civilisation is not borne out by the testimony of history. On the contrary, stability of population has been the normal condition throughout long centuries and rapid growth of numbers has occurred only with-in comparatively recent times. During the last hundred years or so

* See *Modern Review*, Aug. 1926.

the population of the world has increased from 910 millions to 1851 millions. This phenomenal increase has been due to the great scientific discoveries and the epoch-making inventions of new machines and processes of the 19th and 20th centuries which have enabled vastly larger numbers to be maintained in much greater comfort than before. One of the most vital questions which is at present engaging the attention of publicists and economists the world over is whether the present rate of growth of population is likely to be maintained by scientific advance keeping pace with it or whether we must consider that "the magnificent episode of the 19th century is over" (J. M. Keynes) and that the only way of retaining the beneficent results on human welfare of the marvellous achievements of science is deliberately to restrain the growth of population so as not to allow it to press unduly on the means of subsistence. The opinion has been steadily gaining ground of late that even the most advanced modern states are in danger of overpopulation and much is being spoken and written about the measures to be adopted for averting this danger.

In India a battle royal has raged for a long time between contending parties on the question whether unrestricted multiplication has not been one of the major causes of Indian poverty. The official view has been in favour of the theory that overpopulation is a potent cause of Indian poverty while the politicians have generally opposed the theory because its acceptance seemed to exonerate Government from all blame or responsibility for the undeniable poverty of the Indian people. The controversy has suffered because owing to its supposed political implications each of the parties has been anxious from the beginning to prove the theory of overpopulation in India or to disprove it and the discovery of truth has not been the sole motive of the combatants. The student of economics must, however, approach the problem in an entirely dispassionate and unprejudiced spirit.

§ 11. Meaning of overpopulation:—Before we take up the question of overpopulation with reference to India it is necessary to have a clear conception as to what we mean by overpopulation.

Overpopulation may be regarded either as a state or as a tendency and it is best to relate it to the idea of an optimum popula-

tion which has been explained as follows by Cannan —* “ At any given time, or which comes to the same thing, knowledge and circumstances remaining the same, there is what may be called a point of maximum return, when the amount of labour is such that both an increase and a decrease in it would diminish proportionate returns.....If we suppose all the difficulties about the measurements of the return to all industries taken together to be somehow overcome, we can see that at any given time or, knowledge or circumstances remaining the same, just as there is a point of maximum returns in each industry so there must be in all industries taken together. If the population is not large enough to bring all returns up to this point, returns will be less than they might be and the remedy is increase of population; if on the other hand, population is so great that the point has been passed, returns are again less than they might be, and the remedy is decrease of population.

Population means increased labour power which results in an addition to the total wealth but the significant question is whether this addition is proportionate to the increase of population, so that the share per head remains the same as before. It is true that with every mouth God sends a pair of hands but what we want to know is whether the fresh pair of hands will be able “ to pull their own whole weight ”. When an increase in population is expected to lead to the decrease of the per capita income we speak of the tendency to overpopulation. When population has reached a certain size and we have reasons for expecting that a diminution of the size is likely to lead to an increase in the share of income per head or in other words if a decrease in population is expected to result in a relatively slower decrease in means of substance, we speak of a state of overpopulation †

It is not uncommon to have both the tendency and the state existing together and in the opinion of some people India to-day affords an example of overpopulation regarded both as a tendency and as a state.

* *Wealth*, p.p. 68-69.

† Cf. Sargaut Florence, *Overpopulation*. p. 11.

§ 12. Optimum Population :—The ideal to be aimed at by every country is the attainment of the optimum size of population which enables the highest possible standard to be reached, taking into account all the existing circumstances. We may note in passing that the conception of the optimum number involves the idea of a standard of comfort and it is clear that in order to maintain the highest possible standard of comfort two things are necessary. One is the restriction of the population to the optimum number and the second is the retention of the skill in the arts of production governing the optimum number.* *The reduction of an overgrown population can be economically desirable only if it leaves everything else as before.* A great natural calamity such as plague or famine may cut down an overgrown population; but a calamity of this character may have such a demoralising effect and may lead to so much social and economic disorganisation that the smaller population resulting from it may find itself actually worse off than the population in its overgrown condition.

§ 13. Idea of an optimum different from that of Malthus :—As Professor Carr-Saunders points out the idea of an optimum density of population is different from that put forward by Malthus. "To him the problem was one of relative increase of population and of food; with us it is one of the density of population and the productiveness of industry. To Malthus the position was much the same in all ages; in his view population except under unusual circumstances, had in any country at any given time always increased up to the limit of subsistence, and was in process of being checked chiefly by vice and misery. In the modern view increase in skill has brought to an increasingly dense population a larger income per head." The chief cause of the largest income not being reached on all occasions is that at times a population increases beyond the optimum number for the given conditions though at other times the failure of population to reach the desirable level may produce the same result. Malthus' theory has thus been proved to be defective in several particulars but it still contains an important kernel of truth. Malthus was fundamentally right in his estimate of the power of human increase and in suggesting that except under most unusually favourable

* See Carr-Saunders, Problem of Population, p. 224.

circumstances, means of subsistence will not keep pace with the growth of population, if human fecundity is realised to the full. It has been calculated, for example, that at the present average ratio of increase—which, be it remembered, is by no means the highest possible rate, severely restricted as it is by positive as well as preventive checks—a single pair would produce in 1750 years descendants equal in number to the present population of the world. Such being the power of human fecundity it is clear that given full play it will easily overtake any conceivable progress in the arts of wealth production. *If, therefore, the fact of unchecked procreation is established with reference to any country, this must be regarded as presumptive evidence so strong as almost to amount to positive proof that the country in question is suffering from overpopulation.*

§ 14. Mathematically precise calculation of optimum impossible.—Although it is easy enough to define an optimum population it is not so easy to say what exactly is the optimum number for any given country at any given time and further to say what would be the optimum when the children born today become adult workers. It is impossible to give clear and definite answers to these questions and *reliance must be placed on broad indications* when we are examining the position of any given country with a view to find out how it stands with regard to the size of its population—whether it is overpopulated or underpopulated or neither.

When we talk of overpopulation leading to a pressure on the means of subsistence we are really thinking of a departure from the optimum number in the direction of an excess of population which may manifest itself in various forms.

§ 15. Various forms of Overpopulation:—The most extreme case of such a departure would be when there is final overpopulation or saturation which would result if all natural resources are so far exhausted that (nature's response to man's efforts in every direction—in manufactures, agriculture etc.—is following the law of diminishing returns.

✓ A less extreme and more probable case of overpopulation would arise when we have grounds for supposing that, taking natural resources and human skill as they exist at the moment and not as they might be in the more or less remote future, the popula^l.

- * the country in question is too large for the optimum standard for the given conditions to be attained.

It is possible that population may be increased and may be accompanied by a rise in the standard of living. But even under these circumstances we may be in a position to speak of overpopulation if we can show that the rise in the standard of living would be even greater with a smaller population and that the higher standard of comfort does not represent the optimum attainable.

Pressure on the means of subsistence due to overpopulation may thus take a variety of milder forms than actual death from starvation on a large scale; though death from starvation, if it is a normal feature in any society, would correctly be taken as a proof of overpopulation. A high rate of mortality especially of infantile mortality might also be looked upon as an almost certain indication of overpopulation.

§ 16. Case of India:—In the light of the above discussion we are now in a position to consider the question whether overpopulation can be predicated of India at the present time either as a state or a tendency or both

The most important point in this connection is to consider whether any of the preventive checks to the growth of population are in effective use in India. If we come to the conclusion that preventive checks do not exist or that their influence is negligible and that population is mainly restrained in India by the operation of the positive checks we shall have made out a strong case in favour of overpopulation as a present evil in this country.

§ 17. Preventive Checks:—The various preventive checks on population may be classified as follows:— †

* For an excellent discussion of the problem of overpopulation in India the reader is referred to the paper read by Prof. Hamilton before the 7th Indian Economic Conference held in Bombay in 1924. We have adopted Prof. Hamilton's general line of argument though not without considerable variations.

† Cf. Sargent Florence op. cit. p. 18.

I Lower marriage (or union) rate due to postponement of marriage, celibacy.

II Lower fertility per marriage.

(a) Natural: lower fecundity. (b) Circumstantial: Absence of husband etc. (c) Deliberate: abstinence, "self-control," use of contraceptives, deliberate abortion etc.

III Certain social customs and habits: e. g. prolonged lactation, hypergamy.

IV Infanticide. V Poverty, disease &c.

We shall now discuss the question whether one or more of these checks are in use in India and whether their operation is effective for the purpose of counteracting the natural tendency of human increase to outrun the means of subsistence.

§ 18. Marriage rate in India :—The first point to note in this connection is the one to which reference has already been made viz. the universal prevalence of the married state in India especially among the Hindus. Religion in the West frequently enjoins celibacy but in India its weight is thrown into the scale in favour of matrimony. In order to avoid social obloquy all girls must be married before puberty. * Amongst Mahommedans and Animists, though religious sanction is wanting, marriage is equally common. The institution of the Joint Family further encourages early marriage. The family resources being available for the support of the newly wedded couple for an indefinite length of time, prudential considerations such as those which often compel postponement of marriage in Europe have hardly any influence in India. On the contrary economic considerations promote marriage amongst the masses instead of retarding it because the wife is necessary as a household drudge and often helps the husband even in out-door work. The children are also put to work¹ of some kind at the earliest

* " If a high-class Hindu maiden is unmarried at puberty, her condition brings social obloquy on her family and on a strict reading of certain texts entails retrospective damnation on three generations of ancestors. " Risley, People of India, p. 154.

practicable age and begin to pay their way as soon as possible. They are not felt to be a burden because the prevalent standard of life is the lowest compatible with mere existence and does not demand prolonged training for children to enable them to maintain the extremely low standard of life to which they are accustomed. This wastefulness to society of using up its young life too quickly is not commonly realised and even if such a realisation were more common than it is, extreme poverty would hinder parents from putting their children through a long course of training and equipping them more efficiently for the battle of life.

The following tables* show that in spite of provincial variations the marriage rate in India is extremely high compared to that in Europe, the figures for England and Wales being representative of Western Europe generally :—

(A) Proportion of married persons per 1,000 of each sex.

Province	Age	Males			Females		
		1921	1911	1901	1921	1911	1901
Bengal	15-19	228	274		881	896	
	20-39	795	817		784	792	
Bihar and Orissa	15-19	450	419		792	828	
	20-39	807	830		824	841	
Punjab	15-19	263	275	290	753	773	755
	20-39	660	661	695	890	882	896
U. P.	15-19	459	475	495	870	886	878
	20-39	743	758	775	862	868	862
Bombay	15-19	328	349	348	831	851	796
	20-39	746	770	764	819	840	818

* See Hamilton's Paper op. c'

ed. If intercourse at or very soon after puberty affects the health of girls in a highly prejudicial manner, the practice of pre-puberty intercourse is even more harmful and by inflicting serious physical injuries on the girl-wife causes diminished fertility. While the abolition of the custom of early marriage ought to be one of the most important items in any programme of social reform, we must not forget that its net effect might very well be a more rapid increase of population unless other checks come into operation.

The upshot of the whole matter, then, is that *the check to the growth of population due to abstention from marriage or its postponement is practically non-existent in India* and animal instinct fortified by semi-religious sanctions is allowed full play. It is, therefore, not surprising that the Indian birth-rate is one of the highest in the world.

§ 19, II (a). Lower natural fertility:—But in spite of the immensely higher birth-rate the effective increase of population in India is much lower than in European countries, the reason being the very high death-rate. It is often stated, however, that part of this result is attributable to the inferior fecundity of the Indians. The fertility in the case of married women of reproductive age in India is calculated at 160 per 1,000 as against 196 per 1,000 in England* and this is cited in support of the theory that progress in civilisation is attended with increase in fecundity†. It is necessary to

* See Carr-Saunders p. 67

† A good deal of confusion often results owing to failure to differentiate carefully between fecundity and fertility. When, for example it is said that fecundity is greater amongst Mahomedans than amongst the Hindus, the actual reference is to the fact that the Mahomedans are increasing faster than the Hindus. From this alone, higher fecundity of the Mahomedans cannot be inferred. There are a number of other factors which afford a sufficient explanation of the higher rate of increase amongst the Mahomedans such as the absence of the custom of early marriage which is injurious to health and therefore lessens fertility, the prevalence of widow remarriage, the absence of hypergamy, a more generous dietary, a larger survival rate etc. The greater rate of increase of the Mahomedan population revealed by successive censuses may also be partly due to the conversions from Hinduism to Islam (not altogether completely offset by re-conversions to Hinduism, the Shuddhi movement notwithstanding) and further to the fact that other religions like Christianity are able to effect a larger number of conversions from the caste-ridden Hindus than from the Mahomedans.

distinguish carefully between fecundity and fertility. Fecundity is used in the sense of power of reproduction and fertility is taken to mean the actual degree of reproduction. The statement that Indian fertility is lower does not mean that a smaller number of children in proportion to the total population are born in India every year, for this is notoriously untrue, but that, other things being the same, an Indian woman during her reproductive period is capable of producing a smaller number of children than, say, an English woman. However, in England the power of reproduction is not realised fully because celibacy or postponement of marriage are far more common than in India. Hence the fact of a higher birth-rate in India is not incompatible with the theory that Indian fecundity is lower.

It is argued that this difference in fertility cannot be explained entirely by the prevalence of early marriages in India; for although it is no doubt one of the important causes reducing fertility, the wide-spread use of preventive checks in Europe must be granted to be far more effective in this sense and the smaller fertility in India* must, therefore, be put down to lower natural fecundity of the Indian as compared with the European races. It seems to us, however, that the theory which associates increase of fecundity with advance in civilisation is of the nature of a mere hypothesis not yet sufficiently verified by unimpeachable evidence. It is possible that in explaining the lower number of births per marriage in India, the influence of early marriage with its disastrous effects especially on the health of the woman is very much underestimated. It is further possible that the proverbial poverty of the Indian people may have physiological consequences leading to a diminution of fertility. There are also certain other inconvenient facts which the theory must face. For instance, the figure for the births per 1,000 of the married female population of Burma is 229† which is much higher than the corresponding figure for England. Obviously the greater fertility of the Burmese cannot be taken as

* We are, of course, comparing the number of children produced by a married woman in India with those produced by a married woman in Europe. It need scarcely be pointed out that the proportion of married women to the total population is far higher in this country than in Europe accounting for the relatively higher birth-rate in India.

† See Wattal, *The Population Problem in India*, p. 7.

an indication that the English people are on a lower plane of civilisation than the Burmese. Again the Animists are more prolific though very much lower in civilisation than the Hindus. The question as to the connection between civilisation and fecundity has not yet received thorough scientific investigation and in the meanwhile *we will be entirely justified in refusing to attach any importance to the supposed inferior reproductive capacity of the Indian people as one of the factors leading to repress the growth of population.*

§ 20, II (b). Lower Fecundity: circumstantial:—Prolonged separation between husband and wife may occur sometimes; for example owing to failure of rain the husband wanders away from his family and may be absent from his home for months together. But this phenomenon is fortunately so occasional that we need not stop to consider its effect in the direction of lowering fertility.

§ 21, II (c). Moral abstention and neo-malthusianism, etc:—Moral abstinence in the Malthusian sense is certainly not practised to any appreciable extent and the same remark applies to the modern neo-Malthusian devices. There is reason to believe that they are gradually coming into use among the higher middle classes in the big cities and a wider spread of their use may be anticipated in future. But at present their influence in checking the birth-rate in India is practically nil.

Deliberate abortion is still practised to some extent but the law very properly regards this practice as highly criminal and its influence, such as it happens to be at present, in preventing the maximum increase of population in India is rapidly on the wane.*

§ 22. III Prolonged lactation:—The habit of prolonged suckling is common in India and in popular opinion supported by medical testimony, it results in decreasing conceptivity. In Europe, influenced by ideas of preservation of beauty, the mother some-

* Prof. Carr-Saunders, however, relying on the somewhat antiquated authority of Wilson seems to support the view that "the crime of procuring abortion is one of the commonest in India" and that "abortion is especially common in Bengal perhaps 10,000 being destroyed monthly." We think, however, that abortion, so far as it is resorted to, is used more for concealing crime and preventing illegitimate births than as a well-recognised method tolerated by any large section of public opinion for restricting legitimate births.

times does not feed the child at the breast at all or if she does, the child is weaned much sooner than in India. According to medical authority lactation prolonged beyond nine months or a year is harmful both to the mother and child which is another reason why it is avoided by the European mother. The general prevalence of the practice in India must, therefore, be recognised as an appreciable factor acting in the direction of restraining the growth of population.

We have already remarked above that voluntary abstention from intercourse in married life with a view to checking multiplication is almost entirely absent in India. There are, however, certain religious injunctions which result in compulsory abstention at certain periods. Manu e. g. enjoins separation from wife at new and full moon. Owing to various modern influences the faithful observance of such rules is becoming less and less common. But even otherwise, the rules do not require prolonged abstention and their practical effect is altogether negligible.

The custom of hypergamy is still prevalent in some parts of India, for example, in Eastern Bengal and must to a certain extent check population. It forbids the marriage of a girl with a man of a social group equal to or inferior to hers and forces her to marry a man belonging to a superior group. The number of bridegrooms belonging to the upper groups being limited they become the object of keen competition which leads to the evils of high dowries, wholesale polygamy etc.*

§ 23. IV Infanticide :—In extreme cases the difficulty of disposing of a girl in marriage in the manner prescribed leads to female infanticide. The social and religious obligation to marry

* "I know of two Kulins, one of whom married sixty wives and the other had upwards of a hundred; each of these men had a book in which he entered the names of the fathers of the wives married. At the commencement of the cold weather, each would start on his connubial tour with his memo book, and after collecting money from each wife visited, according to her father's circumstances, return home at the beginning of the summer to spend the rest of the year in his village....." Babu Abhaya Chandra Das quoted by Risley op. cit. p. p. 166-167. Kulinism does not at present prevail on such an outrageous scale but it is not altogether extinct. Risley goes on to refer to "a modern development of the principle of hypergamy which has arisen from the demand for graduate husbands in the marriage market of Bengal."

- girls before puberty makes the birth of daughter welcome and is one of the causes of the neglect of children and the custom of hypergamy wherever it prevails. Matters worse for them. But actual female infanticide as a custom is on the wane like deliberate abortion and the combined force of law and public opinion may be expected before long to destroy even its vestiges.

§ 24. V Poverty and disease† :—We have already seen the probable effects of poverty itself in limiting the birth by impairing physical vigour. Poverty, however, is generally recognised as a cause of improvidence and recklessness in breeding. But in India we might say that, if anything, poverty acts rather as a discouragement than a stimulus to marriage. Religion has decreed marriage as a duty to be fulfilled; so that it is often deferred reluctantly because of the want of means for meeting the necessary expenses and as soon as the financial position is improved the very first opportunity is taken to perform the postponed ceremony.

Malarial fever from which hardly any part of India is entirely free is unfavourable to fertility, as women at the reproductive ages are particularly liable to it. In Purnea in Bihar, which is malarious, the highest birth-rate during the decade 1911–21 was 36·95 per mille, whereas in the healthier parts of the province a birth-rate of 46 per millions is not unusual. (Hamilton)

§ 25. Conclusion :— We have given a fairly full account of the different preventive checks—voluntary and involuntary and the extent to which they operate at the present time in India. But the high birth-rate indicates clearly that the combined effects of all these checks is small and some of them—infanticide and abortion—are on the way to extinction and others like early

* In Punjab the practice is said to prevail among the Jats and Rajputs "who would rather see their daughters dead than married beneath their station." Darling: *The Punjab Peasant in Prosperity and Debt*, p. 58.

† Poverty and disease are generally classed under positive checks, but here they have been included under preventive checks because we are considering their effects not in cutting down actually existing numbers but in checking further additions to existing numbers

marriage and prohibition to widow remarriage will lose touch with the progress of social reform and general enlightenment. Removal or weakening of the preventive checks which is balanced by the advent of new checks will obviously accentuate the tendency of population to outrun the means of subsistence.

With birth-rate except under abnormally favourable conditions with it a high death-rate. Another way of expressing the same is to say that there is an inverse co-relation between the population and preventive checks; in the absence of prudential methods of regulating population with means of subsistence painful methods come into operation. It is hardly open to doubt that India is paying the penalty of unchecked procreation and allowing the inexorable nature to work its pitiless solution "so that the superfluous millions go down to fatten the tired earth which could not support them." It is not denied that the high death-rate may be due to the inadequacy of public hygiene and the general ignorance of the laws of health but even these are ultimately traceable to poverty. Of the English people, admittedly one of the richest communities in the world, it has been said that 10 per cent of them are not born into the country but damned into it. A very few are also blessed into it. The percentage of the "damned" is very much higher in India and we do not think that it is much of an overstatement to say that 90 per cent of the people of India are living in sight of the hunger-line. This acute poverty is usually the principal cause of the high mortality amongst infants as well as the adults. A large number of infants die because they are ill-nourished and in the case of grown-up people underfeeding and consequent low vitality make them an easy prey to disease. The terribly heavy mortality during the Influenza epidemic of 1918-19 was due to the low power of resistance of the Indian population, itself the result of poverty.

If new lives are being brought into existence without restraint and the available means do not permit of their being maintained, we have here an evidence of overpopulation and this is broadly the position of things in India. A high death-rate largely attributable to poverty may be looked upon as the acid test of over-

population. *The absence of any effective preventive checks in India taken along with the great power of human fecundity gives a high probability amounting to practical certainty that overpopulation exists in India both as a tendency and as a state.* The tendency may be taken as established if we admit—as we must—the fact of ‘unrestricted procreation.’ The fact or state of overpopulation is rendered highly probable because the constant operation of positive checks generally leads to progressive economic degeneration of a community; at any rate the assertion may be safely hazarded that *a decrease in the present population in India following not from a higher death-rate but a lower birth rate will lead to a slower decrease in means and consequently an increase in the income per head.* Taking into account the present conditions and the possibilities of advance in the near future we may say that India would be a better country for its people to live in, if they bred at a considerably smaller rate.

§ 26. Overpopulation and National Income:—One of the complications with which the problem of overpopulation is beset, is that *the calculations of national income made from time to time in this country seem to show a steady increase of the income per head.* If the population is increasing and at the same time national income is also increasing at least at the same rate, how can we talk of overpopulation? One way out of the difficulty is boldly to *question the accuracy of the various estimates* hitherto attempted of the national income in this country. This is not so outrageous a proceeding as it might at first sight appear because all the estimates are more or less conjectural owing to the absence of accurate data. Many people who have no political axe to grind and who are prepared to grant that British rule has been on the whole beneficial to India, are nevertheless not convinced that it has resulted in an undoubted increase in welfare. Mr. Vincent Smith cannot be suspected of any bias against British rule and yet the most that he can say in effect is that the lot of the people has improved in some respects while it has become worse in others and that on a balance there is some slight advantage in favour of the present times as compared to the days of Akbar.* The improvement in the economic condi-

* “Glimpses of the conditions of the common people are not sufficient to furnish the basis of a minute comparison with the position at the present day. We cannot deduce from them whether the masses were somewhat better off or somewhat worse off than now, but to my mind they offer adequate justification for the statement that there has been no great qualitative change.” Moreland, *India at the Death of Akbar*, p. 270.

tion of the people is not so obvious a fact that he who runs may read it. Even he, who is not in a hurry and takes time to scan the letters, closely, as often as not reads degradation instead of improvement. The standard official retort to this is that for their persistent poverty the people themselves are to blame, because they breed much faster than can be good for them. This is, however, an explanation and not a refutation of the proposition that the condition of the people has not changed for the better, say, during the last fifty years.

Another way out of the difficulty is to *admit the improvement in economic position but hold at the same time that the improvement would have been much greater if the population had been smaller* and if numbers had been kept down by deliberate restriction of births than by the painful operation of the various positive checks. We are inclined to hold that this view is probably in consonance with the real facts of the case.

§ 27. **Positive and Preventive checks:**—We must here warn the reader against supposing that it is a matter of indifference whether a given reduction of population is brought about by the preventive or the positive checks. Nature's methods are often clumsy and quite apart from the immense human suffering which they entail, we must remember that although a great natural calamity may succeed in pruning off an excessively exuberant growth of population it may leave the survivors so demoralised and exhausted that the second state of the society which has been subjected to the ordeal may be infinitely worse than the first and the decrease in numbers thus brought about is entirely consistent with intensification of misery and poverty. It is for this reason, that *from the economic point of view preventive checks are to be preferred to positive checks* as a remedy to the evils of overpopulation; in fact, we may say that positive checks do not cure the disease; they are more apt to aggravate it.

The fact that population in India is increasing at a very much slower rate the increase was only 11% during the decade 1911-1921—than in Western countries—is sometimes put forward as a complete refutation of the theory that the country is overfull of human beings. But the actual small increase does not necessarily point away from overpopulation. We must also prove that wealth has increased at least in the same proportion, and that the per capita

income would have been lower with a smaller rate of increase of the population. Secondly, we must again repeat that the question of questions is whether the population is being restrained from growing faster by preventive or positive checks. We know that the latter have so far been in almost exclusive possession of the field in India which, as we have explained above makes a slow increase or even a positive decrease of population quite consistent with the worsening of the economic position of the people.

§ 28. Other remedies than deliberate check of numbers:—In advancing the view that India is overpopulated we must not be supposed to hold that the country is not capable of accommodating larger numbers if and when its resources are properly developed. While economic development may be regarded as being near its meridian in the West, it is only near the cock-crowing or the morning-star in India. Industrialisation for which the country possesses the requisite qualifications has scarcely yet begun and the point of maximum returns in industries is so distant that it may, for practical purposes, be regarded as capable of indefinite approach. A similar consideration holds good of development of transport, shipping etc. Even in agriculture, the possibilities of extensive and intensive development and irrigation are still far from being exhausted. Again, apart from increase in the production of wealth a better distribution of wealth than at present obtains, will enable a larger population to be maintained at the same pitch of welfare. Furthermore, the population may be more evenly distributed; the surplus population in highly congested districts may be drafted to those parts which are too sparsely populated for proper development. Lastly, emigration to other countries may be resorted to for relieving congestion.

§ 29. Limitations of these remedies:—We must, however, beware of overestimating the possibilities of relief in all these directions. We must remember that *even with the utmost effort put forward for expediting our industrial progress the rate of the progress may not be as fast as one might desire*. India has started late in the race of industrialisation and her progress must be slow compared to that of the Western countries owing to the numerous obstacles that have to be overcome. There are powerful vested

interests of various kinds who profit by the status quo and whose resistance to a change would be formidable. It is said that the present economic backwardness of the country is largely due to government indifference. It is, however, also admitted that the defect of the government policy can only be remedied by self-government the attainment of which is bound to be a slow process. How far Government must bear the blame for the present pitiable economic condition of India is a question with which we have no direct concern here. But assuming for argument's sake that Government's attitude of indifference and at times, as is alleged, even of hostility furnished much of the explanation for the exasperatingly slow progress of industries in India, we must take this attitude, so long as it exists, as one of the factors to be reckoned with.

While working hard to remove all the hindrances as speedily as possible, we must face the unpleasant but undeniable fact that they do exist and although after we have allowed for them, there may still be room for optimism, it will have to be a much more chastened optimism than that generally indulged in by those who are anxious to prove that India is not overpopulated.

Further, even if we ignore the existing obstacles and assume the certainty of a rapid industrial advance, *it is unlikely that the growth of industries will require larger numbers of men than are already available.* Given conditions under which there are practically no voluntary checks on the growth of the population, population will easily overstrip all possible demand for it. We are assuming that nature's positive checks to population are unacceptable to humanity—a position which requires that all additions to population as they occur should be readily absorbed by the fast expanding economic resources. Such a phenomenon occurs sometimes, especially in newly settled countries and even then lasts for a limited period.*

* Another aspect of the matter is brought out in the following quotation:—
 "I am inclined to think that larger capital accumulations permitting the use of scientific inventions have been of chief importance (in bringing about increasing returns in large-scale manufacturing industries); but even if large numbers of men were shown to be necessary, the statistician should inquire whether internal and most of the external economies are not obtained through the large numbers employed in individual organizations, market, or towns. For if this were the chief condition of increasing returns, it would be the increase in the *average* numbers employed per industrial establishment, organization or locality, not the increase in the mass of workers within a whole industry that would offset diminishing return in agriculture. Increase in population might not imply, of and by itself, any increasing return in industry at all." Sargent Florence, op. cit. p. 15)

India, however, is not a new country nor are the opportunities, however optimistically viewed, comparable e. g. to those of England on the eve of the Industrial Revolution. She is, therefore, really not in a position to afford the luxury of a "*Laisser-faire*" policy even for a brief spell.

§ 30. Scarcity of labour as an argument against overpopulation:— One of the usual arguments against overpopulation rests on the alleged scarcity of labour felt both in agriculture and industry. This is met by pointing out that the impression of a scarcity of labour for agriculture is created by the fact that the demand for it is particularly intense during certain brief periods of the year such as the sowing and harvesting time. It is forgotten that during the rest of the year labour is in a condition of enforced idleness. The relative scarcity during the busy agricultural season must always have been felt though the feeling has become more vocal in recent times. Agricultural areas in the vicinity of towns have probably real grounds for complaining of growing shortage of labour owing to the fact that part of the labour force attracted from the villages into the towns is permanently lost to it or that all of it is not available just when it is needed for the agricultural operations. This, however, does not apply to the many rural areas remote from the towns. The idea of a universal scarcity of agricultural labour is difficult to-square with the commonly accepted theory that the pressure on the land is increasing and more people are quartered on it than it can comfortably support. As regards the shortage of labour in industries, this again is more apparent than real. Because it is not that labour is not available but the enormous difficulties of housing in the cities together with the insanitary conditions generally prevailing there, act as effective deterrents which prevent much of the potential supply of labour from being tapped. Nor is there any proper organization in existence for overcoming the conservatism and the ignorance of the people many of whom eke out a miserable existence from the soil though there may be a reasonable prospect of their bettering themselves by permanent employment in the towns. Again, a considerable portion of the demand for labour is for skilled labour. The remedy would seem to lie rather in providing the requisite

facilities for training labour for modern industry. Lastly, demand always means demand at a price and the price offered to the labourer for his labour may not be sufficiently attractive. In recent years prices of commodities have risen very considerably and the well-known tendency of wages to lag behind prices is further helped 'in India by the power of custom, which is still not negligible especially in the rural areas. In the villages, the customary wages move slowly in response to prices and even in the towns they are not high enough considering the rise in the cost of living and the special expensiveness of life in cities. *It cannot be denied that both in agriculture and industry there is a considerable amount of maladjustment between the supply and demand for labour but it is open to grave doubt whether the remedy is a faster increase of population.* An increase in the number of labourers in itself may compel them to accept employment under conditions of work and wages which are unwelcome to them and which they are on the whole in a position to refuse at present. The situation may become easier for the employer but the labourer will suffer. A certain limited class of people may gain temporarily but the nation as a whole will be worse off.

§ 31. **Agricultural Development:**—The possibilities of agriculture, although great, are not unlimited and not altogether easy to realise. There are still undeveloped tracts waiting to be put under the plough but, for the most part, fertile lands have already been occupied and those that remain unoccupied are comparatively less fertile and in any case would ordinarily require an expenditure of capital not within the means of the average cultivator. The possibilities of intensive cultivation are limited by sub-division and fragmentation, the Indian peasant's indebtedness and lack of capital resources—defects which cannot be removed all at once. Again, the adoption of the most up-to-date methods in agriculture can come only gradually and moreover even with the new methods, we must expect that the law of diminishing returns will come into operation sooner or later; for our experience so far, does not warrant us in confidently expecting a succession of epoch-making improvements in agriculture which will hold the tendency to diminishing returns at bay for an indefinite length of

time.* The development of agriculture is bound up with irrigation and large portions of the country present insuperable difficulties for irrigation and must be content to depend upon the vagaries of the monsoon, and cannot hope for any striking improvement in their agricultural position.

§ 32. **Better distribution of wealth** :—Some relief will no doubt come from a more rational system of distribution of wealth. But how precisely to bring about a more rational distribution of wealth without drying up its sources is one of the toughest problems which modern civilised nations are called upon to solve and no satisfactory solution is yet in sight. Besides, in India a more equal distribution is not the principal desideratum as excessively large incomes are very exceptional. What is more urgent at the present moment is an increase in the total volume of wealth and in the production per capita.

§ 33. **Relief from inter-provincial migration** :—As regards the possibilities of a more even distribution of population between the different provinces, apart from the exaggerated estimates about the capacity of tracts, at present sparsely populated, to maintain a larger population, the difficulty of shifting people from overcrowded areas to others in need of inhabitants is too great to be lightly set aside. The language, the ideas, the mode of living and the climate vary so much from province to province in India that any wholesale movement of the population between them cannot be expected. The natural love of home and familiar surroundings is further reinforced by the ignorance, conservatism and unenterprising character of the people.

* " While there was in the past unanimity in regard to the prevalence of this law (of diminishing returns), latterly certain economists have pinned their faith to the belief that " Science, " if it cannot already do so, will in the near future be able to surmount these difficulties, or in other words that the chemist will evolve some process by which at a relatively small outlay, the soil will be forced to give almost uniform returns. If such were ever accomplished, then indeed the law will be a thing to ignore, but the last sixty years, though prolific in discoveries, have given no indication of the birth of any revolution in agricultural practice." Venn : *Foundations of Agricultural Economics*, p. 377, quoted by Hamilton.

§ 34. Relief from emigration:—To expect any appreciable relief from emigration to other countries would argue an inexcusable ignorance of the recent developments in the policy of the colonies on the question of the immigration of Indians whose labour has created new colonial values and made whole regions of the British Empire into paying assets but who are nevertheless unwelcome everywhere now. The attitude of the colonies together with the political helplessness of India makes it quite clear that Indians must work out their economic salvation mainly within the borders of their own country.

§ 35. Population and food supply:—In all questions relating to the problem of overpopulation in India the position of the food supply in the country generally figures in a prominent manner. It is quite true that although taking the world as a whole there must be a balance between food and population, there need be no such balance for any particular country. England, for example, does not produce all the food she requires but finds it more profitable to exchange the manufactured products of her highly skilled population for food drawn from other countries. India, however, does not depend on foreign countries for the supply of food-stuffs and the variation in the amount of food raised in the country has an obvious bearing on the extent of the pressure of population on the means of subsistence. If we can prove that the food supply is increasing at least in proportion to the increase of population we may say that there is no overpopulation at any rate in its extreme form. The statistical evidence on this matter, however, is contradictory in character. Mr. K. L. Datta in his Prices Inquiry Report tries to make out that during 1894–1912 the area under cultivation and especially that devoted to food-stuffs lagged behind the population. This conclusion was not accepted by the Government of India on the ground that Mr. Datta's data were largely conjectural and uncertain and argued that the area under cultivation and the food supply had both kept pace with the population owing, among other things, to the improved outturn consequent upon extended irrigation. Mr. Dubey arguing in 1920, gives figures which he interprets as showing that there is a total deficit of nine to ten million tons of food or of about five million tons if we include the amount exported annually. This, while indicating a present

shortage of supply and, therefore, a state of overpopulation does not tell us whether the position is better or worse as compared to previous years. On the whole we must declare that the evidence in connection with the food supply is unreliable and inconclusive. On the other hand, if there is any meaning in the complaint accepted as well-grounded by all parties that the pressure on the land is growing, it must mean that increase in the products from the soil is less than proportionate to the increase in the population. In 1901-02 the land per unit of the agricultural population was a little over 1.28 of an acre and in 1911-12 the acreage fell to 1.24 which indicates growing pressure on the soil. Taking the whole evidence for what it is worth, we cannot either assert or deny with any degree of confidence that the supply of food-grains is expanding in proportion to the population, though on *a priori* grounds we should not be surprised if there is an actual falling off of the supply in relation to the population.

§ 36. The principal argument for overpopulation :—The cumulative effect of all the arguments in support of the idea that population is increasing too fast in India appears to us so strong as to place it beyond all reasonable doubt. But the main argument apart from that based on the high death-rate etc. may be expressed thus :—Propagation if it is not voluntarily checked inevitably leads to an excess of the population in relation to the means of subsistence. In India there are no voluntary checks in use and, therefore, India is suffering from the evil of overpopulation.*

§ 37. Increase in wealth an indirect but powerful remedy :—To avoid any misunderstanding we may repeat what has already been suggested above viz. that the admission of overpopulation as a tendency and fact does not imply that all efforts at economic improvement are useless. Such an inference would be invalid and

* In spite of the validity of this general conclusion we believe that in view of the vast extent of India and its endless variety of climates, races and natural resources, the study of the intricate problem of overpopulation would be more enlightening if undertaken on the smaller scales presented by the districts and provinces; also owing to the caste system and other peculiarities of the Indian society there is an unusually large number of non-competing groups and the examination of each separate group, caste or profession would give a more valuable insight into the nature and extent of overpopulation than a broad general survey which alone we have found it possible to attempt here.

in the highest degree mischievous. Increase of wealth such as may be expected from a more vigorous policy directed towards agricultural and industrial progress may express itself in an increase of numbers, but to some extent it may also result—and it is desirable that it should so result—in raising the standard of living. *A higher standard of living once attained generally increases the will and the ability to maintain it by voluntarily restricting population.* Such has been the course of development in the West and we may reasonably anticipate that similar causes will produce similar effects in India. A considerable improvement in the economic condition of the people would make them realise, as nothing else will in the same degree, the necessity of bringing the increase of numbers under “the deliberate guidance of judicious foresight” (Mill). The most promising solution of the problem of overpopulation in India, therefore, would be for the people and Government to strain every nerve and sinew in body and mind for furthering the economic development of the country in every possible direction. If it is true that overpopulation is one of the causes of poverty, it is equally true that poverty by inducing recklessness intensifies the evil of overpopulation. If, therefore, Government policy in the past can be shown in its positive and negative aspects to have retarded economic development in any considerable measure, Government cannot escape all blame by merely pointing to the fact that the people of the country do not understand that it is far better to prevent births than to allow deaths by starvation. The only proper defence for Government would be to show, that on their part they have always been inspired by a single-minded devotion to the interests of the country and spared no effort to remedy the poverty of the people and that further their policy has all along been not only honest and energetic but also correct and well-thought-out.

§ 38. Importance of deliberate restriction :—On the other hand, if the people themselves are made to see the necessity of checking an undue growth of numbers and making them bear proper relation to the available resources so as to maintain a high average of well-being, this would be a welcome and highly desirable change. Those who talk of the immense unexploited resources of the country and suggest that their presence is a

complete justification for people not exercising, in the matter of propagation, man's unique capacity of considering the remote results of his conduct, confuse the possible with the actual. After all there is wisdom in the popular adage which asks a man to cut his coat according to his cloth. The means "in hand" or "in sight" rather than remote possibilities of immensely increasing them should be taken as a guide for determining the suitable size of the population at any given time. No doubt the globe will support a very much larger population than at present if the dreams of scientists become every-day realities and the unlimited energy of the sun and the tides is effectively harnessed in the service of man; posterity may then smile at our solicitude in regard to the population problem. It will nevertheless be foolish to act as if all this is an accomplished fact. While avoiding the attitude of the sceptic who denies all possibility of future development, we must be on our guard against the error of the all-too-confident dogmatist who forgets the difficulties in the way of the development and secondly--and this is the more important point--we must not forget that even if the highest development comes about in the minimum of time we should still be well advised in resorting to deliberate restraint of population if we would benefit to the utmost possible extent from the increase in the national resources. *Even assuming the most rapid industrial and agricultural advance we must remember that this would absorb only a small part of the increase in numbers which is arithmetically possible.* If full vent is allowed to human fecundity it will inevitably bring into the arena all the evil forces such as wars, pestilences, famines etc. embraced by the phrase "positive checks." Economic development must be regarded as a temporary relief and not a permanent cure for the evils of overpopulation and it requires at all stages to be reinforced in a greater or less degree by the practice of "prudential restraint which distinguishes rational human beings from rabbits."

§ 39. Limitation of families: pros and cons ~Most people readily agree or ought to agree that every individual should try to limit his family according to his resources so that his children may get at least as good a chance in life as he himself. Just as seeds should not be sown too thickly if the resulting plants are not to be poor

in quality, so the children in a family should not be too numerous for each to be able to enjoy reasonable opportunities for self-development. High natality generally goes with low vitality causing a high death-rate amongst infants. The labour expended in trying to bring up children which eventually die for lack of proper care and sustenance is so much energy wasted and their brief career causes much useless suffering to the parents as well as to the other children that do manage to survive. From the individual point of view it is advisable to restrain oneself from bringing children into existence until one can reasonably count on being able to maintain them. And what is good for the individual is also good for society as a whole, for if children are persistently produced by large sections of people without forethought of any kind the general standard of living would be inevitably lowered.*

There are, however, people who hold that the disadvantages of restriction, on the whole outweigh the advantages. For example, it is pointed out that children following closely upon the heels of one another get a better chance of developing character than those which are too widely spaced out and are deprived of the advantages of mutual pressure, correction and admiration. It is further said that large families have a valuable educative effect on the parents themselves in that they help the cultivation of patience, gentleness and self-denial and make for nobility of character. Again it is urged that the maintenance of a baby is not an expensive thing, at least in the first few years of its life a fact constantly overlooked by champions of limited families. All these arguments contain a substratum of truth. But the fact remains that the misery and suffering in many families is directly traceable to their "devastating torrent of children." Caution and foresight may indeed be carried too far as in France, but the opposite evil of recklessness is equally serious and its consequences are writ large on the face of present-day Indian society.

The mention of France leads us to another favourite argument advanced against birth-control viz. that limitation of population may be carried to such lengths as to be a menace from the military

* Harold Cox, *Problem of Population*, p. 118.

point of view.* France is the classical example of this, where the state is alarmed at the refusal of the population to grow or to grow fast enough and efforts are being made to induce the people to raise up larger families lest Germany, the traditional enemy, with her more prolific population should wipe out France by reason of her superior man-power in the next inevitable war. With reference to India, however, it is easy to see that she has nothing further to desire in the way of mere numbers. More than numerical strength what is really required for military efficiency is a high standard of physical health and intellectual alertness, discipline, organisation, the most up-to-date equipment for defensive and offensive warfare and a strong unifying national consciousness.

§ 40. Methods of limiting population : I Moral Restraint :—

Even amongst those who admit the desirability of limiting births there is no unanimity as regards the best means for the purpose. Some people would advocate moral restraint as the only safe remedy. But although there is a tendency to underestimate the extent to which moral restraint is actually employed by middle class families in Europe, we must admit that it will never be adopted with sufficient generality by all classes of people to be of much use in keeping down the excessive growth of population. On the whole, we may say that preaching prolonged abstinence to married people as a cure for overpopulation is like suggesting the cutting out of the stomach as a cure for hunger. Both have about an equal chance of being adopted. Malthus himself fully recognised this and hence the pessimistic tone of his writings. Moreover, there appears to be a respectable body of medical opinion according to which continuous self-denial over long periods is on the whole a remedy worse than the disease on account of its harmful reactions on the mind and body of the married couple.

* However, as Harold Cox points out, "unrestricted multiplication is in itself one of the most powerful causes of war as it intensifies the struggle for existence between the different nations, though it is often advocated as an effective protection from unprovoked aggression. As soon as a population grows big, its leaders say, "Our people are so numerous we must fight for more space." As soon as war has taken place, the leaders invert the appeal and say, "We must breed more people in preparation for the next war." How is this horrible sea-saw to end? It cannot end unless all the nations of the world will agree to recognise that since the overgrowth of population is a necessary cause of war, a moral duty rests upon each nation to limit its numbers to avoid conflict with its neighbours." p. 85.

II. Contraceptives :—The old methods of abortion, infanticide etc. are rightly frowned upon by law and opinion and nobody would be so foolish as to suggest a reversion to them. Their abandonment marks a step forward in ethical standards and is a welcome sign of progress. The only alternative that remains is the use of contraceptives and the heavy decline in birth-rates characteristic of most European countries today is undoubtedly due to the wide-spread use of artificial methods of birth-control.*

The commencement of the fall in the birth-rate in the Western countries has synchronised in each of them in a striking manner with the beginning of birth-control propaganda. Thus in England the fall in the birth-rate coincides in a remarkable manner with the Bradlaugh trial in 1877 when Mrs. Besant and Charles Bradlaugh were prosecuted for publishing a pamphlet advocating birth-control by artificial means. Their trial attracted tremendous public interest and incidentally spread 'birth-control' information of which large numbers of people proceeded to make practical use.†

The question arises whether we should welcome the use of contraceptives in India. *We may brush aside the common objection that their use is unnatural.* So is the use of clothes and cooked food and medicines and countless other things associated with civilised life. We must, however, consider other more important objections, the commonest of which is that the spread of information about contraceptives will remove one of the most powerful deterrents to sexual immorality. The rejoinder that the morality which is merely due to fear of consequences is hardly worth having is not convincing for prevention of irregular relations brought about by no matter what motives, is

* In explanation of the low and lowering birth-rates in the Western countries, it is sometimes suggested that there are cycles of oscillation in birth-rate and that the present low birth-rate is merely an expression of race-physiology and may be followed by a cycle of comparatively high birth-rate. The expectation of a higher birth-rate, however, does not seem likely to be fulfilled and in any case the present birth-rate has diminished too rapidly to be fully accounted for by the theory of race-physiology.

† See Sargent Florence, op. cit. p. 31-32.

socially desirable.* It must be admitted that among those that are tempted, there are some who are prevented from falling by the fear of detection or of producing an illegitimate child. A large number of the cases of abortion in this country are, however, prompted by the idea of concealing a crime and the dissemination of the knowledge of contraceptives may to some extent lead to their taking the place of abortion. However that may be, it would be pertinent to ask in connection with this discussion what would happen to civilisation if society were to act consistently on the principle of discarding everything that is liable to be misused by a section of the people. While admitting the dangers attendant upon the spread of information regarding contraceptives, it may be possible to reduce the risk by the state taking steps against a promiscuous broadcasting of such information and making it available only to those who have morally and economically valid reasons for seeking it.†

All these arguments, it may be granted, are more valid under the altogether different social conditions prevailing in the West than in this country. It must be admitted that here, an indiscriminate propaganda in favour of birth-control methods is likely to result in

*In meeting this objection against a wide-spread knowledge of the methods of birth-control Harold Cox argues as follows:-(i) Sexual irregularity already prevails throughout the world and that there is no ground for the fear that the knowledge of the means to prevent conception would necessarily increase prostitution or the number of irregular relationships. On the contrary, some of these irregular relationships are due to the fact that many people are prevented from entering into the holy state of matrimony by the fear of unwanted children. The knowledge of methods of preventing children would hasten marriages and to that extent reduce the evils of promiscuity. (ii) It is not true that any considerable number of people are deterred from irregular gratification by the fear of illegitimate children as is shown by the high rate of illegitimate births in the European countries. (iii) There are grounds for believing that the welcome decline of the rate of illegitimacy in recent years is due to the popularisation of methods of birth-control. (Harold Cox, op. cit, pp. 134-138).

‡ In England, Dr. Marie Stopes has established a clinic in London for giving private advice on contraceptives. There are also a few other organisations doing the same kind of work in the poorest quarters of London. (See Blacker op. cit. p. 93)

an increase in sexual immorality. The question at issue however, is whether it is not worth while taking all the risks while attempting to minimise them by judicious state-control of such propaganda, for avoiding the more serious evil of overpopulation.

Another objection to birth-control by the use of contraceptives is based on the consideration that it is more likely to be practised by the more prosperous and intelligent sections of the population and not by the poorest who, while most in need of it, are, owing to their very poverty, the most reckless and improvident, and among whom, moreover, women occupy a lower status and have to pass through the ordeal of child-bearing often against their will. The result of this is that population increases at the wrong end of the social scale and birth-control will, therefore, lead to a progressive deterioration in the quality of the people. This view does not necessarily imply that the poor man's children are likely to be inferior in respect of innate physical and mental endowment than those of the rich man. But their excessive number makes it difficult for them to be reared in such a manner as to bring out the best that may be in them. Apart from poverty and the consequent spirit of recklessness, one of the reasons why the lower classes fail to profit by the new knowledge about birth-control is that very often they do not possess it and the remedy for this would seem to be to make it more accessible to them. In the west, the complaint is often heard that the higher classes tend to carry control of births to socially harmful extremes preferring a needlessly high, not to say a frivolous standard of life, to the burden and the joy of bringing up even a moderate number of children and it is suggested that every form of pressure and persuasion should be brought to bear on them so as to make them realise that it is morally incumbent on them to give to the state as many healthy, strong and well-educated citizens as possible. In India, however, at the present moment all sections of people whatever are prone to overmultiplication rather than the reverse and an organised effort for inducing a deliberate restriction of population would seem to be necessary.

§ 41. Birth-control an important question for India:—The question of birth-control has not received the serious consideration it deserves in this country and superficial objections to it have so

long held the field. We have tried to show that the question is at least "worthy of deliberation" and cannot be summarily dismissed by vague generalisations about the unlimited possibilities of economic development open before the country and a persistent refusal to try to understand the very elements of the problem of overpopulation.

In discussing modern methods of birth-control, we have merely been concerned to show that the usual arguments against them are not so conclusive as they appear at first sight. Some authorities have questioned the efficacy of these methods and hold that the decline in birth-rate, a phenomenon which is well-nigh universal in the countries of Western Europe, is due to quite other causes than the wide-spread use of contraceptives. Others again hold that the comparatively harmless methods of birth-control are beyond the means of the poorer classes and that large numbers of them have recourse to admittedly injurious ways of controlling births and this is a matter for grave concern, for the evils that arise in this manner are far more serious than the evil of overpopulation.

Opinions such as these have been expressed by people who have a claim to be heard with respect—which only shows that the controversy has not yet reached a stage where it is possible for laymen to make up their minds.

One thing, however, seems clear viz. that the present birth-rate in India is too high and ought to be slowed down, although there may be disagreement as to the probability of action being taken by the people for this purpose on the scale required and further as to the efficacy or desirability of the methods known at present.

§ 42. Migration:—I. Movements of population within the country.* "Of all sorts of luggage", as Adam Smith remarks, "man is the most difficult to be transported"—an observation which is particularly applicable to India. According to the Census Report of 1921, the total number of persons who were born outside the district in which they were enumerated was about 38 millions representing

* Sections 42 and 43 have been mostly condensed from the Census Report, 1921, Vol. I, pp. 83-89.

roughly 10% of the total population of India. And of these 38 millions as many as 20 millions were born outside the district of enumeration thus illustrating the essentially "home-loving character of the Indian people, which is the result of economic and social causes, and of the immobility of the agricultural population rooted to the ground, fenced in by caste, language and social customs and filled with an innate dread of change of any kind." There are, however, certain definite territorial movements of the population within the country in response to economic stress on the one hand, and economic opportunities on the other, although *these movements are too insignificant in dimension for bringing about an equalisation of the pressure of population on the means of subsistence.* We shall now notice some of the more important streams of migration within the country.

Assam:—Assam with her tea-garden industry and the cultivable waste land of the Brahmaputra Valley attracts a large and steady stream of immigrants from the other provinces. The tea-garden industry draws its foreign population from Bihar and Orissa, the Central Provinces, the United Provinces and Madras, while settlers in the Brahmaputra Valley come principally from Eastern Bengal. A third movement of the Nepalis into Assam is mostly pastoral in character. The total volume of immigration into Assam from all sources is considerable as can be seen from the fact that nearly a quarter of the population of the province is foreign or of foreign extraction. There is still a very large area of land in Assam available for cultivation but the prevalence of the Kala Azar and other diseases and the lack of satisfactory communications prevent a more rapid absorption from other districts than is actually taking place.

Bengal:—Bengal is found to have received during 1911–1921, on a balance, a net addition to her population of over a million. About 65% of the immigrants come from Bihar and Orissa and the rest from the United Provinces (18%), Nepal (5%), Assam (4%), the Central Provinces (3%) etc. The most important currents of immigration are (i) from Bihar and Orissa and the eastern districts of the United Provinces into the industrial area round Calcutta, (ii) from the Santal Parganas into the districts of Birbhum, Malda, Dinajpur and Northern Bengal, (iii) from Nepal and Chota Nagpur

into the Darjeeling and Jalpaiguri tea gardens and (iv) from Assam into the Tripura State.

The immigration into Bengal is due to the comparatively greater fertility of the soil, the relatively greater development of industries especially round about Calcutta and the aversion to manual occupation which is a particularly marked characteristic of the Bengali people. The chief feature of the internal migration in Bengal is a movement of the population of the central belt, on the one hand, towards the industrial districts round Calcutta and, on the other hand, into Northern Bengal and the Assam Valley.

Bombay:—During the inter-Censal period 1911-1921, the Bombay Presidency gained 489,000 persons. The noteworthy feature of the immigration into the Province is the growing absorption of outsiders into the large industrial and commercial cities of Bombay, Karachi, and Sholapur coming from Baluchistan, the North-West Frontier Province, the Punjab, the United Provinces and Rajputana, Hyderabad (Deccan) and Madras. To quote Mr. Sedgwick, the Bombay Census Superintendent, "There are two streams of immigrants which reach us, one from north-west India represented by the huge area of Baluchistan, the North-West Frontier Province, the Punjab, the United Provinces and Rajputana; and the other coming from the south-east from Hyderabad and Madras.....The stream from the north goes to swell the proletariat of Bombay and Karachi; and the Hyderabad stream goes to the mills at Sholapur....."

The net immigration from north-western India during 1911-1921 amounts to more than 350,000 persons of whom about a third come from the U. P., two fifths from Rajputana and the rest from Punjab, North-West Frontier Province and Baluchistan (the immigration from Baluchistan being mainly into Sind). As regards internal migration in the Province the principal feature is the influx of population into the industrial cities from all parts of the Province. The Deccan being mainly an arid tract chronically subject to agricultural depression is throwing out its superfluous numbers to the other parts of the Bombay Presidency and it contributes to the Bombay city the highest quota of all the divisions.

Burma.—The total immigrant population of Burma is 707,000 persons, of whom 573,000 are Indians. Indian immigrants have increased since 1911 by 16% and the larger percentage of women among the immigrants shows that the immigrants who intend to settle down permanently in Burma are on the increase. Madras sends the largest quota of immigrants after which come Bengal, United Provinces and Punjab. The Indian immigrant is now mostly engaged in urban industries and does the heavy manual work for which the Burman has no taste.

However, with the growing self-consciousness of the Burmese and the increasing economic pressure due to a growth of the indigenous population, immigration into Burma is becoming more and more difficult for the people in the congested areas of British India.

II. Emigration:—There are at present about 1½ million Indians settled in various parts of the Empire outside India. Indian emigration has been broadly of two kinds. The first was that of unskilled labourers under indenture as in the case of Fiji, Mauritius, Natal and the West Indies or under some special system of recruitment such as was adopted in Ceylon and Malaya. The second is the spontaneous emigration of people belonging to the professional, commercial and artisan classes. The scope of the latter kind of emigration has been wider than that of the former and it has penetrated to places that never came under any system of assisted emigration. This applies, for example, to the Self-Governing Dominions with the exception of South Africa and certain Crown Colonies especially of the East African territories. (See India in 1925-26, p 229). The Census Report (1921) gives the following table showing the colonies which attract an appreciable number of emigrants from India.

Indian emigrants to certain colonies.

	In thousands.
Ceylon	461
Straits Settlement and Malay	401
Natal	47
Trinidad	37
Fiji	33
Mauritius	17
Kenya	17

The majority of the emigrants work as agricultural labourers on plantations of rubber, tea, coffee etc. Indentured labour emigration was stopped in March 1917 and as a result the volume of emigration has shrunk very considerably. The resolution of the Imperial Conference, 1921, reaffirmed the principle that each community of the British Commonwealth should enjoy complete control over the composition of its own population by restricting emigration from any of the other communities and most of the countries within the Empire have exercised their right of regulating immigration within their borders so as to discourage if not altogether exclude Indian immigrants. The reasons may be political, racial, or purely economic; but the unpleasant fact must be faced that emigration as a remedy for relieving congestion at home is practically impossible so far as the Indian population is concerned.*

§ 43. Eugenics:—The human being is the most important machine in the production of wealth and whatever improves the physique, intellect and the character of the people also adds to their economic strength and efficiency. The subject of heredity has been much studied in recent years in its bearing on the improvement of plants and animals of economic value and important practical results have been achieved in this direction. The remark is often made that what man has been able to do for plants and domestic animals, he has never been able to do for himself. But the difficulty in the matter of studying heredity with reference to human beings and applying its laws so as to improve the race has been that it is impossible to experiment with human beings or to treat human beings like plants and animals within wide limits in the matter of mating.

* It not necessary to enter into the details in connection with the various phases of the Emigration policy of the Government of India. The numbers involved at the present moment are insignificant and the question cannot be regarded as in any sense vital from the point of view of economic conditions in this country. The Emigration Act of 1922 proclaimed assisted emigration of unskilled labour to be unlawful except for such countries and on such terms and conditions as may be specified by the Governor-General-in-Council. There is also a Standing Emigration Committee of the Indian Legislature to advise Government on all major emigration questions such as the fixation of standard wages of unskilled emigrant workmen, terms of colonisation of Indian settlers etc.

It is nevertheless of the utmost importance for the welfare of the race that its perpetuation should depend, as far as possible, on those individuals who are best suited to serve the needs of the community. This has become all the more urgent because the tendency of modern civilisation is to eliminate some of those factors which made for the destruction of the physically and mentally unfit. Under primitive conditions the weaklings had small chance of surviving in the struggle for existence and propagating their kind. Those that were exceptionally courageous and resourceful would for instance get more wives than the weaker members and would, therefore, be more prolific. In modern times, however, owing to improved sanitation and progress in medicine and surgery together with the growth of the humanitarian spirit, natural selection has ceased to operate.* There is no effective ban on the physically unfit, the mentally unsound and the morally degenerate carrying in them the seeds of hereditary disease, marrying and perpetuating their stock. Owing to the difficulties connected with scientific observation and experiment the science of Eugenics has been advancing very slowly and our knowledge of the laws of heredity in their application to the inheritance of human characters is still very meagre. All we can do at present is to draw certain deductions regarding human beings from the rules which the animal-breeder finds it profitable to observe. Any practical scheme of Eugenics would have a positive and a negative aspect. That is, it would aim at encouraging the reproduction of the specially fit and discouraging or preventing the reproduction of the specially unfit. In India, certain rules of eugenic value are followed in arranging marriages. For example, marriage is prohibited within certain degrees of relationship. Again, the castes are divided into certain exogamous sections or Gotras the members of which are regarded as so closely related that they are

* It must, however, be remarked that natural selection under primitive conditions did not necessarily bring about the survival of the best. As has been well said, natural selection often preferred muscle to brain and low cunning to artistic genius. Again, the advance in medicine and sanitation undoubtedly increases the economic efficiency of the community as a whole. All the same, the proposition is incontestable that under modern conditions many more unfit people are enabled to survive and breed than would have been possible under primitive conditions.

not permitted to intermarry. It has been questioned, however, whether this particular taboo has any scientific basis. On the other hand, there are certain practices in India whose effect must be the deterioration of the race. We have already referred to the constant inbreeding amongst the members of the same caste as one of these. On the whole, India stands as much in need as any other country, of enlightenment on the laws of human heredity. It is indeed futile to hope that even with the fullest enlightenment spontaneous action will secure the propagation of the most desirable stocks. At the same time, even in the most advanced western states, legislative schemes of positive eugenics are at present out of the question because they will be resented as unduly infringing the liberty of the individual. However, some countries are already making tentative experiments in eugenic legislation. Thus in the U. S. A, the State of Nebraska forbids marriages to any one suffering from venereal disease. The State of Connecticut forbids the marriage of epileptic or feeble-minded persons. Montana sterilises its idiots and epileptics by an operation which leaves the sexual function undisturbed while destroying the power of reproduction. It has been suggested that sterilisation may be resorted to in the case of hardened criminals and other undesirable types.* In most countries, however, under the present state of public opinion and sentiment, it is not possible to go very far in the direction of popular eugenic legislation. But the state may do something towards educating public opinion on this important matter by spreading information and offering advice. The city of Berlin has a municipal advisory bureau for candidates for matrimony where advice given is based mainly on medical considerations but the psychological factors have also a great part. It is unlikely that such official and semi-official eugenics will be able to do much good in India until the people are educated up to the level of realising the importance of practical eugenics.

§ 44. Public Health and Sanitation:—The importance of Public Health and Sanitation in maintaining the economic efficiency of

* See Blacker, *op. cit.*, pp 67-69.

the people cannot be overrated. The prodigious mortality in India due to such scourges as plague and influenza, malaria, small-pox, relapsing fever etc. is economically disastrous on account of the dislocation in the machinery of wealth production which it causes and every effort should be made to control it. In England, during the last seventy years enormous strides have been taken in the improvement of public health and as a result, typhus, cholera, scarlet fever, diphtheria have been practically wiped out. In India, the listlessness, lassitude and apathy characteristic of the people are largely the result of diseases like hook-worm and malaria, "the sinister performers in the grim tragedy of the endemic diseases played out upon a stage upon which no curtain ever falls." (Ronaldshay). These diseases seize and devitalise many more people than they actually kill and it is impossible to overestimate the economic advantage that would accrue from stamping them out. Systematic education of the people on a large scale in hygiene is necessary and the departments of public health need to be further strengthened. The initial expense would be heavy but it would be well worth while as the results in higher economic efficiency although not immediate would be great and certain.*

45, Education:—In order to develop the economic efficiency of a people to the fullest extent general knowledge and intelligence as well as special training in particular vocations is necessary. In India, both as regards general and technical education most of the work still remains to be done. But this is a topic to which we

* "In a true sense the nation can buy health, but the goods are not delivered on the date of payment. Public expenditure on national health is like expenditure on a life-boat or a fire-engine; even more, it is like a long-term investment. It yields the interest with absolute certainty, a hundred-fold but only in the course of years and sometimes in the course of generations. It is money hidden in maternity, in clean streets, in sanitary houses, in an abundant water supply, in dispensaries, hospitals and sanatoria and in the vast net-work of a sanitary and protective cordon in every village and city in the land..... Sometimes we hear the idle question, 'What is the use of all our expenditure on health?'. It is often asked by persons who do not reflect that their welcome presence among us alive, alert, and competent is itself the answer." Annual Report of the Chief Medical Officer of the Ministry of Health (England) 1921, quoted by W. A. Robson, "*The Relation of Wealth and Welfare*," p. 48.

will have to revert later on in connection with agricultural and industrial progress.

§ 46. Racial aptitudes :—Economic progress is apparently also a matter of innate racial capacity and certain races have shown no aptitude for it. It is, however, a most dangerous thing to indulge in facile generalisations about the superiority of some races and the inferiority of others. Many of these generalisations are no more than summaries of existing facts. Because the Indian people happen to be backward economically and culturally at the present time, some writers pretend that they are incapable of scaling the heights of civilisation attained by the European nations. It is thus, we might imagine, that an Indian observer might have generalised about the inhabitants of the British Isles who were tattooed savages roaming about in the forests when the Indian himself could boast of a mighty civilisation. If it had been suggested to him that the descendants of these savages were destined to rule over India, he would have greeted the suggestion with pardonable contempt and incredulity. The miracle has nevertheless happened and it is now the turn of Indians to make good their claim to be considered capable of civilisation. History is strewn over with fatuous judgments on one people by another. Towards the end of the 18th century, Western Europe looked upon the Russians as semi-savages and D'Alembert and Diderot could not think it possible that they should ever be civilised up to the European standard. The Negroes are still generally regarded as incapable of ever attaining equality with Europeans and as regards Indians the view has sometimes been expressed that, like all brown races, they are incapable of continuous progress, being subject to some strange fiat of arrest which condemns them to an eternal reproduction of ideas and to long periods of immobility succeeding brief intervals of advance. Such views stand condemned if for no other reason at least because they ignore the obvious fact that the Indian people do not constitute one single race but that various racial strains have entered into their composition. Further, an appeal to history conclusively proves the unsoundness of the theory that Indians suffer from any inherent incapacity for building up a respectable material civilisation. It is a matter of common knowledge that it was the wealth of India that attracted foreign adven-

turers to this country. Even in their present fallen estate, competent observers have been able to discern elements of greatness in the people of India and have admitted that, given a fair chance, Indian brains are no whit inferior to European brains.* Nor is it true that they are averse to or incapable of applying their undoubted brain-power to the task of economic organisation and advancement.

We may, therefore, conclude that there is no need for the Indian people to allow themselves to be borne down by any overwhelming consciousness of hopeless and irremediable inferiority as regards aptitude for economic progress.

* General Smuts in an address he delivered in Johannesburg on the 26th of August 1919, used the following words, "I do not look down on Indians. I look up to them.....There have been Indians who have been amongst the greatest men in the history of the world. There have been Indians who have been amongst the greatest leaders of the human race, whose shoes I am unworthy to untie. "

CHAPTER IV

SOCIAL AND RELIGIOUS INSTITUTIONS.

§ 1. Influence of social and religious institutions on economic activity:—Social and religious institutions and ideals exercise a profound influence on economic activity, and it will be our task in this chapter to describe the institutional basis of economic life in India and consider how far the more important of these institutions help or hinder the economic progress of the people. That the religious and social background of economic life in India requires a special study need not be laboured. For it is evident that the various aspects of Indian economic life have received their peculiar shape and mould from the characteristic social and religious institutions of the land.*

§ 2. The caste system:—The caste system constitutes the most noteworthy feature of Indian society and we may begin our discussion of it with the standard definition of caste.

A caste has been defined as a "collection of families or groups of families bearing a common name which usually denotes or is associated with a specific occupation; claiming common descent from a mythical ancestor, human or divine; professing to follow the same calling; and regarded as forming a single homogeneous community. A caste is almost invariably endogamous in the sense that a member of the large circle denoted by the common name may not marry outside that circle; but within this circle there are usually a number of smaller circles each of which is also endogamous. Thus, it is not enough to say that a Brahman at the present day cannot marry any woman who is not a Brahman; his wife must

* "The sociological life of the people has determined in India systems of land tenure, the organisation of the village life.....and the joint family and the Caste system have regulated from times immemorial the rights of the individual as a member of a family, as a member of society and as a member of the guild or trade to which he was attached by birth." Chatterji: *Indian Economics* p. 80 "

also belong to the same endogamous division of the Brahman caste " *.

The caste system in India must be distinguished from the numerous social gradations that exist among all nations. These latter are not divided into so many water-tight compartments and there is no religious taboo to prevent the passage of an individual from one social stratum to another. There are also no restrictions as regards marriage and everybody is at liberty to choose whatever profession or occupation he likes. Under the caste system, on the other hand, the Hindu Society is divided into an immense number (3000) of entirely separate groups, small and large, the conduct of whose members is restricted by an elaborate code of caste rules and they are prohibited from intermarrying and commonly also from interdining with members of the other groups supposed to be inferior in status. In India, " birth determines irrevocably the whole course of a man's social and domestic relations and he must through life eat, drink, dress, marry, and give in marriage in accordance with the usages into which he was born." (Imperial Gazetteer.)

§ 3. Three main types of Castes:—Castes are divided into three main types, the functional, the racial and the sectarian. The most important of these are the functional castes, representing the various occupations that were followed in earlier times before the introduction of machinery.† Instances of the functional castes are the Brahman or the priestly caste, the trading or the

* *Imperial Gazetteer of India* Vol I, p. 311.

† Community of occupation can scarcely be regarded as the sole basis of the caste system. Because, as Senart observes, if this were so the institution " aurait montre moins de tendance a se morceler, a se desloquer; l'agent q'u'il aurait unsee d'abord en aurait maintenu cohesion." (would have shown less tendency towards subdivision and dislocation; the factor making for unification in the first instance would have maintained the cohesion). If the community of occupation had been the sole or even the principal basis of the caste system we should have had all persons following the same occupation constituting only one caste. But as we know this is not the case. For instance, all weavers even in the same region do not always belong to the same caste. (See Risley: *People of India*: pp. 269-270.)

Baniya castes including amongst others the Khatri of the Punjab, the Agarwal and Oswal of Rajputana etc. It would be tiresome to enumerate all the functional castes. They include artisans such as weavers, carpenters, potters, goldsmiths; village servants such as cowherds, barbers washermen and various other occupations such as astrologers, oil-pressers, cattle-breeders, musicians etc. The racial castes are numerous in all parts of India. In Bengal, we have the Rajbansi, the Chandal etc; in the United Provinces and Bihar the Bhar, Chero etc; in Rajputana and the Punjab the Jat, the Jujar and Meo; in Bombay, the Koli, and Mahar; and in Madras the Nayar, the Paraiyan etc. The sectarian castes are those that have originated from religious sects such as the Lingayat caste in Bombay founded by a religious leader who denied the supremacy of the Brahmins.*

§ 4. *The origin of the caste system :— The origin of the caste system has been the theme of endless and ingenious speculation and learned controversies and although we are more concerned with the caste system as an existing fact than with its genesis, we may mention some out of the many conjectures and theories that have been put forward. In the Institutes of Manu we are told how the Supreme Soul which contains all created beings and is inconceivable, produced by a thought a golden egg (Brahmand), in which the Supreme Soul was himself born as Brahman, the creator of the whole universe. Then he caused the Brahmin, the Kshatriya, the Vaishya and the Sudra to proceed from his mouth, his arms, his thighs, and his feet respectively and fixed for each of them their particular duties.§ The Brahmin was to study, teach and perform the sacrifices; the Kshatriya was to protect the people; the Vaishya was to trade and to cultivate the land; the Sudra was to serve the three foregoing groups. " Starting from this basis, the standard Indian tradition proceeds to trace the evolution of the caste system from a series of complicated crosses, first between members of the four original groups and then between the descendants of these initial unions."†

* See Gait's Article op. cit. p. 231.

§ See also Purushasukta, the 90th Hymn of the 10th Book of Rigveda Sanhita.

† Risley : *The People of India* p. 258.

Leaving aside these fanciful speculations and coming to more modern attempts at an explanation on a rational basis of the caste system, we may refer to *James Mill's Theory*, according to which the original division of society into castes must have been *the work of some inspired individual who foresaw the advantages of a systematic division of labour*. James Mill accounts for the subordination of one caste to another by superstitious terror on the part of the weaker members of the community and the designing lust of power characteristic of the priestly caste, which succeeded in securing for itself the position of the premier caste to which all the others owed veneration and respect. Next to calamities sent by Heaven, the ravages of war which the priestly class pretended to be able to avert are to be dreaded most and so the military class occupied the next place of importance after the Brahmanas and so on.*

According to Senart's theory "caste in the normal development of ancient Aryan institutions, which assumed this form in the struggle to adapt themselves to the conditions with which they came into contact in India. In developing this proposition he relies greatly upon the general parallelism that may be traced between the social organisation of the Hindus and that of the Greeks and Romans in the earlier stages of their national development the difference being that the distinctions in India became rigid and stereotyped unlike in Europe. ‡

* See article on Caste, Encyclopaedia Britannica.

‡ Risley. Op. cit, p. 267

Commenting on Senart's theory Prof. Banerjea remarks, "It appears quite probable that, being surrounded on all sides by hostile aborigines, the Aryans found it necessary to set apart the hardiest portion of the population for the exclusive occupation of war and government. Thus perhaps was formed the Kshatriya caste. Then, as engagement in warfare was found incompatible with the performance of religious ceremonies and the acquisition of learning and the imparting of education, the most intellectual and selfless among the people formed themselves into a separate caste. Thirdly, as the importance of agriculture, industry and trade was realised more and more with the growth of civilization, a third class began to devote their energies exclusively to those occupations; and lastly, the less cultured among the Aryans together with the conquered tribes formed the Sudra caste. In course of time, subdivisions of these original castes were made and many new ones came into existence." (Banerjea : *Indian Economics*, p.p. 34-35.)

“ Distribution over a wide area, tending to multiply groups; contact with the aborigines encouraging pride of blood; the idea of ceremonial purity, leading to the employment of the indigenous races in occupation involving manual labour, while the higher pursuits were reserved for the Aryans; the influence of the doctrine of metempsychosis, which assigns to every man a definite status determined by the inexorable law of *Karma*; the absence of any political power to draw the scattered groups together; and the authority which the Brahmanical system gradually acquired—these seem to be the main factors of M. Senart’s theory of caste ”

§ 6. The rigidity of the caste-system :—The problem of the origin of caste and its later evolution, is in reality insoluble from the nature of the case and the various theories must all be pronounced more or less inadequate as they fail to explain fully what requires particular explanation viz. *the unparalleled rigidity of the caste system in India*—a rigidity which was further enhanced when the system crystallised in opposition to the successive waves of the Mahommedan invasions between the 12th and the 18th centuries and thus reacted in a most unexpected manner to the essentially democratic influences of Islam. There is reason to believe that in the early stages of its development the caste system was fluid in character, at least so far as the first three castes were concerned, which seem to have been based initially on the principle of social selection and division of labour rather than on that of heredity or birth, and permitted inter-marriage and passage from one group to the other. How exactly this original fluidity was lost must forever remain a question incapable of precise determination. It may be that the original taint of inferiority attaching to the Sudra caste either because it represented a conquered race of aborigines (*Dasyus*) or for some other reason acted as a leaven which in course of time premeated the whole social system. It is also possible that the great importance

* Risley: op. cit. p. 269. A somewhat different explanation is that of Benjamin Constant according to whom caste is based on the religious idea of an indelible stain resting on certain men and the social idea of certain functions being assigned to certain classes.

attached to the proper performance of ritual and sacrifice amongst the Aryans, concentrated power into the hands of the group which specialised in the performance of religious functions enabling it to use this power for its own social aggrandisement. It may also be that various other factors referred to by M. Senart as noted above had their due share in bringing about the final result. We should further be tempted to accept the suggestion that a settled state of society favoured the growth of caste by ensuring the continuity of functions through several generations and thus fixing the principle of inheritance and heredity* but for the difficulty that similar stationary conditions prevailed throughout Europe before the Industrial Revolution without bringing about a social organisation any way comparable to the caste system in its rigidity. For a similar reason we are constrained to reject as inadequate the contention that the undeveloped state of communications together with the ignorance of the masses by making social intercourse difficult confirmed the caste organisation. †At best most of these explanations suggest how the movement towards rigidity when once started was helped forward. They do not tell us how it originated. On the whole, therefore, the question of the origin and development of the caste system must be given up as "an insoluble and unprofitable conundrum."

§ 7. Merits and Achievements of the Caste System :—Passing on to the merits of the caste system especially from the economic standpoint, while no sensible person will think of defending the caste system in its present form, we must admit that a quest for some rational principle at the root of what appears an essentially irrational and chaotic arrangement is not altogether hopeless. One of the animating principles which may be said to have once rationalised the caste system is that of division of labour which makes for economic strength and efficiency. We may also point out that at one time or another, professions in most countries were hereditary in practice, if not in theory, and there were obvious

* See Wadia and Joshi: op. cit. p. 124.

† *Ibid* pp. 124-25.

advantages attaching to the hereditary system under which the son naturally imbibed the secrets of the family occupation and acquired proficiency in it with the minimum of effort in the congenial atmosphere of home and under the affectionate care of the father. This was especially important when there was no organised system of public instruction and when a high premium was placed on manual dexterity. The system gave the father help at a cheap rate and afforded the easiest introduction to life for the son who often inherited the custom and the reputation of his father as a craftsman as the most important part of his legacy at the latter's death. The value of transmitted skill in the crafts was very great and the hereditary principle helped this transmission. So long as this principle was worked in a natural and rational manner it could not be open to any objection. This, however, ceased to be the case as soon as the adoption of a new profession became not merely unusual but wrong and punishable\$

The functional castes have often been compared to the Mediaeval guilds in Europe and have been regarded as beneficent agencies fostering the recognition of mutual bonds created by common pursuits. *Like the old Trade Guilds of Europe they served the purpose of mutual benefit societies* for their members by training apprentices, by promoting good feeling among the members, by providing courts of arbitration for settling disputes, by regulating wages and profits of their members and by helping them occasionally in distress." "The caste organisation is to the Hindu his club, his trade union, his benefit society, and his philanthropic society.†" It must, however, be noticed that the European *guilds differed from the caste in certain important particulars*. In the first place, *the guilds were voluntary associations* which the castes are not. Secondly, although in the guilds the sons of existing members enjoyed great advantages as apprentices, *qualified strangers were admitted* at any rate before the guilds degenerated into close monopolistic corporations. Moreover,

\$ See article on Caste, Encyclopaedia Britannica, 11th Edition.

* See Chatterji: op.cit. p. 92

† Sidney Low: *Vision of India* p. 263.

intermarriage was permitted and was purely a matter of social feeling. In India, the admission into a particular caste has been entirely a matter of heredity and intermarriage is strictly prohibited. Again, in the case of European guilds, "the common occupation was a real tie, a source of strength in the long run against the nobles and kings, not a symbol of disunion and weakness like caste in India."^{*} Some writers have held that "like the guilds of the Middle Ages in Europe the castes may have developed and fostered art and industry" and that "the system may have preserved the wonderful mechanical skill and dexterity of the artisan classes in the face of foreign competition." ‡ While there is undoubtedly some truth in this view, it is also quite possible that the lack of adaptability and general unprogressiveness which characterise the Indian crafts at the present day may be due to the trammels of the caste system which must have tended to check natural advance.§

In defence of the caste system it may be granted that *in the*

^{*} See Risley: *People of India* p. 270. The same author observes, "If the guild had been a caste, bound by rigid rules as to food, marriage and social intercourse, and split up into a dozen divisions which could not eat together or intermarry, the wandering apprentice who was bound to travel for a year from town to town to learn the secrets of his art, and who survives, a belated but romantic figure, even at the present day, could hardly have managed to exist; still less could he have discharged, like Quintin Matsys and a host of less famous craftsmen, the traditional duty of marrying his master's daughter."

‡ See Wadia and Joshi: *op. cit.* p. 126

§ "A guild may expand and develop; it gives free play to artistic inspiration; and it was the union of the guilds that gave birth to the Free Cities of the Middle Age. A caste is an organism of a lower type; it grows by fission, and each step in its growth detracts from its power to advance or even to preserve the art which it professes to practise." Risley: *op. cit.* p. 270.

*days of the Aryan invasion it probably helped the collaboration of races and co-operation of cultures.**

It also probably enabled the Hindu society to face the shocks of political invasion without itself suffering dissolution. Further, *the caste system may be admitted to have led to the fundamental stability and contentment of the Indian society.* Till recently career and occupation in India were settled entirely by the birth of a person. This saved him from the worry and the restlessness incident in modern society to the choice of an occupation. The occupation being fixed for a person at his birth, he was protected from "the canker of social jealousy and unfulfilled aspirations."

§ 8. Caste system indefensible in its present form:—All that can be said in favour of the caste system, however, applies only to the time when it had not assumed its modern chaotic aspect. The caste system in its present development deserves only unqualified denunciation. It is one of the greatest drags on progress in every direction which the perverted ingenuity of man has devised for his own undoing. Whatever its initial merits it has at present degenerated into *a vast engine of oppression and intolerance and a malignant force making for social and political disunity and weakness* † If it is fair to describe Indian nationality at the present

* "The system of castes is in reality neither Aryan nor Dravidian but was introduced to meet the needs of the time when the different racial types had to live together in amity. The only way of conserving the culture of a race which ran the great risk of being absorbed by the superstitions of the large numbers of native inhabitants was to pin down rigidly by iron bonds the existing differences of culture and race. Unfortunately, this device to prevent the social organisation from decay and death ultimately prevented it from growing." Radhakrishnan: *Indian Philosophy* Vol. I pp 112-113. "The hereditary disability imposed by the Aryans reacted within their own circle and has borne such bitter fruit through so many centuries" Rhys Davids, quoted by Radhakrishnan.

† "The population of a district or a town is a collection of different nationalities, almost different species, of mankind that will not eat or drink or intermarry with one another. It is hardly too much to say that by the caste system the inhabitants of India are differentiated into 2,000 species of mankind, which in the physical relations of life have as little in common as the inmates of a zoological garden." (Sir Bampfylde Fuller: *Empire of India*) This is rather a heightened way of putting the matter but there is no doubt that the extraordinary heterogeneity of the Indian population is mainly due to the caste system.

moment as a crazy quilt of patches with no warm sense of unity binding its different parts, this is to no small extent due to the operation of the caste system. The caste system has prevented, in India, the evolution of a strong nationality *which has been promoted elsewhere by a process of unrestricted crossing between the different races inhabiting a common territory. It is a great political handicap under which the Indian people are labouring at the present moment and it has often been a source of political weakness in the past. For example, there is much force in Professor Jadunath Sarkar's contention that the downfall of the Maratha Empire was largely due to the unhealthy development of the caste spirit. We range ourselves with those who believe that it is impossible for the Indian people to realise their economic destiny to the full without political emancipation and the caste system undoubtedly acts as a great obstacle to the attainment of political *Swaraj*.

§ 9. Endogamy and racial degeneration :—One of the points urged in favour of the caste system is that it tends to preserve the purity of certain superior racial stocks and that the Hindus are not the only people who have adopted elaborate devices to maintain this purity. But nowhere else is to be found the strict adherence to the principle of endogamy peculiar to the Indian caste system which leads to constant inbreeding and ultimately to the deterioration of the superior stocks. Moreover, while in some castes there is a great excess of males and in others a great excess of females the caste system prevents the attainment of sexual parity as the deficiency in one caste

* " By caste must not be understood the four broad divisions of the Hindus—which exist only in text-books and airy philosophical generalisations delivered from the platform. The caste that really counts, the division that is a living force is the sub-division and sub-sub-division into innumerable small groups called *Shakhas* or branches (more correctly twigs, or I should say *leaves*, they are so many) into which each caste is split up and within which alone marrying and giving in marriage, eating and drinking together take place. Apart from every caste divided into mutually exclusive sections by provincial differences there are still further subdivisions—among the members of the same caste in each province—due to the differences of districts, and even the two sides of the same hill or river." Jadunath Sarkar in *Modern Review*, May 1927.

cannot be remedied by the superabundance in another. This is in some measure responsible for the social evil of heavy dowries and the persistence, in certain parts like the Punjab, of the practice of infanticide.

§ 10. Caste prevents correspondence between aptitude and function:—One of the most serious disadvantages of the caste system is that it prevents that close correspondence between inborn capacity and industrial function which is such a fundamental element in economic progress and welfare. "The moment you divide your men into water-tight compartments on the mere accident of birth irrespective of their temperament and qualifications and at the same time refuse them their birth-right to develop their natural capacities and faculties to the highest possible limit, you deny your nation all the advantages that otherwise would have added to the store of national wealth and well-being. We do not know how much harm is being done to the economic activity of the people, by putting men in the wrong places, denying as it does equal opportunities to all."*

§ 11. Immobility of capital and labour:—Another great drawback is that the caste system prevents free mobility of capital and labour. Mobility of labour is hindered by making a change of occupations or of place difficult. As under the old system of handicrafts the artisan uses his own capital, immobility of labour necessarily implies immobility of capital as well. Furthermore, the system leads to the formation of rigid non-competitive groups leading to the over-crowding of certain occupations and an undue advantage being given to others that lie strongly entrenched behind the caste walls artificially protecting them from external competition.

12. Caste a hindrance to large-scale enterprise:—The caste system impedes the progress of large-scale enterprise in various ways. In the first place, there is a *lack of speedy adjustment between demand for and supply of a particular kind of labour*. In the second place, *the system militates against a minute sub-division of labour* characteristic of modern large-scale production. Besides, owing to the caste system it is *difficult to bring*

* Ketkar: *Indian Economics*.

together intellect, manual labour and capital which are often isolated from each other forming separate castes.* Then again, *consumption becomes localised and sectarian* as every caste distinguishes itself from every other in its mode of living with many differences as regards food, apparel, utensils etc. A very large variety of commodities has, therefore, to be produced, but each single commodity on a small scale. The result is that though the country is large, the scale of production tends to be small making economies of large-scale production difficult of realisation. Another minor point is that improvement in the economic conditions of the socially lower classes is not always reflected in a better standard of life there being no chance of the lower classes being admitted into the fold of the higher classes and thus by force of example adopting the superior standard of the latter.†

§ 13. Caste and dignity of labour:—The caste system produces amongst the higher castes a disinclination towards certain occupations and forms of labour normally followed by the lower classes and thus often prevents them from improving their economic position and *intensifies the evil resulting from the overcrowding of certain so-called genteel professions*. It is true that in Europe people have no illusions about the dignity of labour, the tendency being not towards an apotheosis of work but rather towards its reduction and more even distribution. At the same time, everybody feels entirely at liberty to follow what occupation he likes in order to advance his material welfare and no form of honest labour is regarded as degrading in itself and there is no such thing as a man losing his caste and incurring social obloquy because he chooses to follow some other than the ancestral occupation. This, it need hardly be observed, promotes mobility of labour and capital and makes for economic strength. Another loss entailed by the caste system comes from the existence of caste *prejudices against the use of certain methods of improvement* in agricultural and

* The failure of early joint-stock banking in India has been attributed, *inter alia*, to the fact that one of the helps to success was often lacking viz. that a bank should consist, if possible, of men of the same caste to ensure harmonious working.

† Cf. Prof. Bhatnagar's *Basis of Indian Economy*

industrial production, the objection to the use of bone, fish and nightsoil as manure for agricultural land entertained by many castes is an instance in point.

§ 14. Caste antagonistic to principle of equality:—The caste system is a negation of the beneficial principle of equality and injures the higher as well as the lower castes. It breeds in the former a false and distorted sense of superiority and in the latter a mental attitude fatal to the development of self-respect. An extreme example of this is offered by the depressed and the untouchable classes who are subjected to unheard of humiliation and to many disabilities not only social but also economic. The unfortunate victim of this system "is constantly a loser in ordinary commercial operations through his inability to enter a shop or even to pass through streets where shopkeepers dwell. Social ostracism, so degrading, persisting through immemorial centuries, has naturally constituted a most serious obstacle to manliness, independence and capacity towards self-help."†

§ 15. Influence on Caste of Western Civilisation:—¶ The influence of Western thought and the introduction of so much of the modern machinery of civilisation like railways etc. is tending in some measure to break down the barriers of caste. Owing to the linking up of the village with the outside world and the growth of trade and modern industry an increasing number of people have begun to find it advantageous to give up their old traditional occupations and seek employment in the new mills, mines and workshops. Members of the higher castes are being driven by the stress of economic circumstances to follow professions hitherto assigned exclusively to classes lower in the social scale. Many Brahmins, for instance, are setting up as tailors, traders, shopkeepers etc. Vocation is, therefore, no longer a sure index of caste. The exigencies of railway travel again have led to the relaxation of certain taboos on food, drink and personal

† Moral and Material Progress Report, 1923.

¶ See Gait's article on "Caste" in the Encyclopaedia of Religion and Ethics.

contact—a process helped by Western education with its levelling tendencies.*

Western education and culture, university and college life where the low-caste man rubs shoulders with the high-caste man, the growth of large towns, the influence of the ruling race, the development of a spirit of scepticism † are all undermining the spirit of caste exclusion. While reducing amongst the higher classes the inclination to insist on their privileges they are making the lower classes less disposed to admit without question the superior status of the higher castes. Again, there is now only one law applicable without distinction to high and low and the state no longer encourages the pretensions of the higher classes, nor does it favour their admission to the superior posts in Government service. On the contrary, appointments are now preferably given to the lower castes and a sort of inverted caste system is being introduced. The lower castes are becoming more self-conscious and alive to the necessity of removing their old disabilities by concerted communal action. This tendency has manifested itself even in

* “..... the rules about the diet and contact with other castes rest upon a metaphysical theory of ceremonial pollution which admits of many exceptions. Ever since the time of Manu it has been recognised that the devout traveller, when in danger of starvation, must pocket his caste scruples and satisfy his hunger as best he can. In modern times, and especially since the introduction of railways, this comfortable doctrine has been developed and elaborated by Brahmanical casuistry. It has long been held, for example, that sweetmeats, a generic and elastic term which includes, all the promiscuous messes sold on the railway platforms, may be taken from almost anybody. Nice enquiries about the caste of itinerant vendors of sweetstuffs cannot be prosecuted from the window of a third class carriage during a short stoppage, and a modern proverb sums up the position in the practical query, ‘You have eaten the food he gave you, why ask about his caste?’ On the same principle, the wise man finds it convenient to forget that ice was once water, that soda water, before it found its way into a cunningly contrived bottle owned the same humble origin and did not necessarily come straight from the Ganges; that certain essences and extracts used for medical purposes bear an ascertainable relation to beef, and that imported biscuits must have passed in their making through the hands of all sorts of casteless folk. Nor is he so indiscreet as to enquire at how many paces’ distance his neighbour can convey pollution, when he must in any case rub shoulders with him in the railway carriage for twelve hours on end.” Risley: op. cit. pp. 279–280.

† Cf. Chatterji: op. cit. p. 95.

*the lowest of the low castes like the Mahars who are now making organised efforts to assert their rights. The Hindu-Moslem tension again, is making even conservative Hindus more amenable to the influence of ideas of social reform and social equality. The very existence of the Hindus as a community, it is felt, depends upon their putting their house in order, which means, among other things, that the caste system must go or at any rate must be altered beyond recognition. Various Hindu political leaders have started a crusade against the caste system and Mahatma Gandhi has initiated a movement particularly directed towards the removal of the curse of untouchability.

§ 16. Vitality of the caste-system :—In spite of all this, however, it would be a mistake to suppose that the caste system is moribund. Unfortunately, it still holds its sway in practically unabated strength. The hold of caste is so strong on the Indian mind that it has even affected communities like the Mahommedans whose religion places such strong emphasis on the complete equality amongst the followers of Islam and the task of releasing Indian society from the monstrous coils of caste appears pretty hopeless. Recent events would seem to have, if anything, intensified some of the evils of the caste system. More especially the new Reforms, however beneficent in other ways, have assuredly tended to increase the bitterness and ill-feeling between the various communities by leading to a scramble for political power. We have referred above to the general awakening among the lower castes and although this is a welcome development in many ways, in practice it is often seen that devotion to one's own caste means a fanatical hatred of the superior castes and much energy is thus being wasted in feeding fat the ancient grudge against the higher castes. The new rights conferred on the people by the Reforms are not infrequently misused for fostering narrow sectional interests to the neglect of the wider national interests and the various castes with their improved organisation and strengthened self consciousness are made to serve as a ready-made system of standing political caucuses. While the different castes are giving free vent to their grievances against the castes higher up, they are generally not prepared to treat on terms of perfect equality the castes lower down than themselves in the social scale. Like all levellers they wish to level down as

far as themselves, but they cannot bear levelling up to themselves. Brahminism is, indeed, everywhere on the defensive but the spirit of Brahminism still persists and has permeated the lower castes.

§ 17. Remedy for the evils of the caste-system:—When one thinks of the manifold evils of the caste system, one is tempted to sigh for some powerful beneficent despot who would shatter to bits the present social structure and refashion it on more sensible lines. But there is no prospect of a despot appearing and it is doubtful whether any despot would ever command the colossal power that would be required for putting through the Herculean task of demolishing the caste system. It would appear, therefore, that the only way to extricate Indian society from the meshes of the caste system would be by means of a social revolution. Such a revolution, however, would have to be on a vast scale—much vaster, for example, than the French Revolution, and to possess far greater transforming energy. But a revolution of this character is scarcely possible. There is no single caste sufficiently powerful to lead it and there is no single enemy to fight. Every caste would be opposed to every caste above it. It would be a case of a war waged by a non-existent army against an enemy who is nowhere because he is everywhere.

The drastic solution of a despot or a social revolution being out of the question we come to the prosaic and commonplace conclusion that *we must wait for the progress of education and the spread of general enlightenment gradually to disintegrate the caste system so as to make it innocuous*. We may add that the enlightenment must spread especially to the female sex whose ignorance and conservatism make them so tenacious of the old restrictions and observances. Similarly, it is of the greatest importance that it should penetrate into the villages so as to overcome the most serious opposition to reform in this respect to be faced in a predominantly rural country like India.

§ 18. The Joint Family system:—Another characteristic feature which may be regarded as the normal condition of Hindu society is the joint and undivided family. In the West, the family gener-

ally consists of wife, husband and the minor children. In India, however, there may be living together at any given time, perhaps three generations with several collaterals constituting a single household.* An undivided Hindu family is ordinarily joint not only as regards property, but also as regards food and worship. The institution of the Joint Family is the basis of Hindu Law as regards marriage, adoption, maintenance, and especially the laws of inheritance and succession.

§ 19. The Origin of the Joint Family:—The origin of the Joint Family is generally attributed by economists to the advance of civilisation from the pastoral to the agricultural and industrial stages of economic development. "Where the hunting and root-grubbing stage was supplanted by developed agriculture, the labour of man in tilling the soil, constructing the house and maintaining the patrimony became of signal importance. The male is now the chief factor in the economic process, and we accordingly find the patriarchal family" *The economic causes are reinforced by a strong sense of kinship and a religion emphasising ancestor-worship* and the institution thus becomes a complex socio-economic organisation designed to secure the spiritual and economic welfare of the large family-groups of which society comes to be composed. The joint-family patriarchal organisation of India which became practically universal throughout the country after the Aryan occupation bears a close resem-

* The modern Hindu joint family is a community the members of which are all descended from a common ancestor, and the wives and unmarried daughters of those who are married. Perhaps the wives and daughters might more correctly be said to belong to the family than to be members of it. In its complete form the family is said to be joint in food, worship and estate.....Every Hindu family has a common home. This does not mean that there is a single house in which all the members of the family continuously reside, but there is one house where the family Gods remain, where the wants of all the members of the family are provided for, where the family worship is conducted, and to which every member of the family is at any time at liberty to resort. This is the real home of a Hindu. Any other residence, however long it may last, is looked upon as temporary. Here also the wives and children remain whilst the men are employed at a distance." (Encyclopaedia Britannica Vol. XIV, pp. 436-437)

§ Seligman, *Principles of Economics* ch. VI, bk. 2.

blance to that of the Ancient Greeks and Romans, *patria potestas* having its counterpart in India in the supreme authority with which the eldest male member of the family is invested in the conduct of all the affairs of the family. He may be regarded as a sort of trustee administering the property of the family and regulating its affairs for the general material and spiritual welfare of its members, and is empowered to take any course of action calculated to achieve this end. The women of the household have a separate female head with corresponding authority in matters of internal domestic economy and often not without considerable influence in the regulation of the external affairs of the family as well, which, however, constitute the special charge of the senior male member. After what has been said so far, it is superfluous to add that the earnings of every member are thrown into the common stock from which they are drawn as required by the head of the family to meet the needs of all. Every one earns according to capacity and receives according to need. Thus the joint family organisation may be regarded as the nearest approach to the ideal of a socialistic community.

Apart from kinship, religion and social tradition, economic conditions of life and labour helped the Joint Family to maintain its cohesion and solidarity for long centuries. *Difficulties of communication and travel* compelled all the members of the family to live together and to carry on jointly the hereditary family occupation in agriculture, industry or trade.* Such a state of things naturally precluded the individual member from going abroad and carving a separate career for himself out of the usual way. Nor was there much scope for the employment of differential ability which is the essential characteristic of the present complex economic organisation.

§ 20. Merits of the Joint Family System:—Several points may be urged in favour of the Joint Family system. In the first place, it teaches men to labour without selfishness and suffers none to lack. To everyone is guaranteed at least a bare subsistence which is the very first condition of economic progress. Children who may happen to be orphans are properly cared for and not turned adrift into the world before they are in a position to face its trou-

* Bhatnagar : *Basis of Indian Economy*.

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bles. Similarly, the Joint Family affords a safe and respectable asylum to the unfortunate widows for whom the escape of re-marriage from their helpless condition is not ordinarily available. The Joint Family again, renders superfluous, any state provision in the shape of old-age pensions, poor relief and the like for the aged, the poor and the infirm, who in spite of their disability are made to fit into the household being assigned work suited to their strength and capacity. More generally, we may say that the Joint Family secures advantages of a simple division of labour to some extent, by giving to each member such work as is suited to him. In the village, the women-folk and the children of the cultivator's and artisans' families help the adult males in their occupations a consideration of some importance at a time when there was practically no labour to be had on hire.

In the field of consumption, much saving is effected by preventing reduplication of household equipment and establishment and thus a small income is made to go a long way and comparatively large families can be maintained without much effort. So long as a Joint Family keeps together the most economical use of its assets is possible and evils such as excessive subdivision and fragmentation of land are avoided.

Over and above these economic advantages, the Joint Family at its best fosters the virtues of self-discipline, sacrifice, obedience and reverence.

§ 21. Defects:—We must, however, now pass on to notice certain inherent defects in the Joint Family system which are being brought into relief by the altered circumstances of today. One of the main defects of the Joint Family system is *the absence of correspondence between reward and effort* which, we may note in passing, has been advanced as an effective argument against most forms of Socialism. Human nature being what it is, the best stimulus to strenuous endeavour is the certainty of being able to reap the whole of the fruit of one's effort. This stimulus is generally wanting in the Joint Family. On the contrary, it happens only too frequently that the certainty of being looked after, whether one works or idles away one's time, breeds drones in the family lacking in the sense of self-respect and responsibility.

As the very root idea of the Joint Family is the subordination of the individual to corporate ends necessitating the minute regulation of the conduct of every member by the family head, the environment is *uncongenial for the development of individuality and for any kind of initiative and enterprise* amongst those whose duty is simply to receive orders and obey them. The head of the family is the only exception to this. But even in his case the sense of responsibility to the family often keeps him from the bold acceptance of risks so necessary for economic progress today. Further, the earnings of individual members being spread thin over the whole family, *the accumulation of capital and, therefore, large-scale enterprise are discouraged*. The development of family affection has its beautiful side but it encourages stay-at-home habits making for immobility of labour.

§ 22. Modern disintegrating influences :—Modern conditions on the whole being unfavourable to the maintenance of the Joint Family system its defects are being forced into prominence and the system is generally giving way to the various forces which are at present being brought to bear upon it. In the first place, the development of communications and transport have opened new opportunities for individual initiative and the more enterprising members of the family are impelled to leave the family fold and carve out an independent career for themselves. In the second place, the loss or the decline of old family occupations has made it impossible in many cases for the family to keep together and has forced dispersal on it. The subtle influence of Western individualism has not failed to make an inroad on the solidarity of the Joint Family. The markedly individualistic bias of the British Civil Law and Procedure is further hastening the break-up of the Joint Family. The intensification of the struggle for existence, coupled with the growth of the individualistic spirit is making the Joint Family more or less an anachronism. The familiar picture of domestic bliss and contentment generally associated with the Joint Family of old has ceased to represent the facts of the case. The spirit of give and take has given way to uncompromising assertiveness, with the result that discontent and petty squabbles are the order of the day in many families run on a joint basis today.

While on the whole we welcome the gradual dissolution of the Joint Family system we must not be understood to favour a blatant individualism which is entirely self-centred and feels no call of conscience to stretch out the hand of helpfulness to the weak and needy amongst one's relations. The problem is to steer clear of the complete suppression of individuality on the one hand and the other extreme of the complete suppression of the spirit of mutual sympathy and helpfulness. The need for self-sacrifice would always remain but it would have to be voluntary instead of obligatory.

§ 23. Laws of Inheritance and succession:—After the discussion of the Joint Family we pass on by a process of natural transition to the consideration of the Laws of Inheritance and Succession which are largely governed by the institution of the Joint Family. As Seligman observes, "The institution of private property lies at the basis of modern economic life" and has been the product of a long evolution in which three main stages may be distinguished. The first stage is that of group or communal property. The second stage is that of inalienable and joint family property. The third stage is that of individual private property. In India, we may be said to be still in the second stage though the transition to the third has already commenced. *The presumption of Hindu law is still in favour of undivided family property unless there is a regular partition.**

* "In England, ownership as a rule is single, independent, and unrestricted. It may be joint, but the presumption will be to the contrary. It may be restricted, but only in special circumstances and under special provision. In India on the contrary, joint ownership is the rule, and will be presumed to exist in each individual case, until the contrary is proved. If an individual holds property severally, it will in the new generation relapse into a state of joint tenancy. Absolute unrestricted ownership, such as enables the owner to do anything he likes with his property is the exception. The father is restricted by the son, the brother by his brothers, the woman by her successor. If property is free in the hands of its acquirer, it will resume its fetters in the hands of his heir. Individual property is the rule in the West. Corporate property is the rule in the East. And yet, although the difference between the two systems can only be expressed in terms of direct antithesis, it is pretty certain that both had a common origin. In India, the past and the present are continuous. In England, they are separated by a wide gulf. Of the bridge by which they were formerly connected a few planks.....are all that now remain." Mayne on Hindu Law and Usage, p. 305.

...I. E. 17

§ 24. The Mitakshara and the Dayabhag System :—Originally so far as there was any notion of ownership of family property, it was in the nature of what we in these days call corporate ownership. The ownership was vested in the family as a whole and did not belong to the individual members of the family in the sense that partnership property belongs to partners. The head of the family was only the uncontrolled manager of the property. The question of the distinction between ownership and managership did not arise so long as alienation was not permitted. But when the question of alienation did arise in course of time, conflicting theories were propounded by each of the two leading commentaries on Hindu Law, Mitakshara and Dayabhaga.* *According to the Mitakshara School, the sons are joint owners of the family property along with the father even in his life-time. According to the Dayabhaga School, they became owners only when he dies.* In either case the father is the uncontrolled manager. The difference is only with regard to ownership. Under the Dayabhaga system, the father is the sole owner during his life-time. Under the Mitakshara, the father and the sons together are owners not as individuals but as a corporation. This difference has led to different principles of partition and inheritance. If any member of a joint Hindu family desires a partition he can demand it as there is no compulsion on the members of a Hindu family to live in common. In the Dayabhaga school, however, there can be partition only as between brothers and descendants of brothers, but not between a father and his sons, because the latter are not owners. Under the Mitakshara system, there can be a partition even between father and sons as the ownership is jointly vested in them and in the event of a partition the sons can always insist on their rights being respected.†

* There are two systems of inheritance in India. viz. the Mitakshara and the Dayabhaga. The latter prevails in Bengal and the former in other parts of India. "The difference between the two systems is due to the fact that under the Mitakshara School consanguinity is the governing principle for determining the right of inheritance, whereas, under the Dayabhaga system its place is taken by the doctrine of religious efficacy which means the capacity of the successor to benefit the person." (See Mulla, *Principles of Hindu Law* p.16)

† In the case of Indian States and in some Zamindari estates no partition is allowed, the throne or the property descending to the eldest male member. It is only in these exceptional cases that the Law of Primogeniture prevails.

§ 25. Inheritance under the two systems:—Passing now to the Law of Inheritance, by inheritance is meant the transfer of ownership which occurs at and in consequence of death.* *In a Mitakshara joint family, there can be no inheritance as the death of a member makes no change in ownership and property remains undivided unless partition is insisted upon.* As Mayne points out, property under Mitakshara, so long as the family chooses to remain joint devolves upon the members of the family for the time being by survivorship and not by succession. Even under the Dayabhaga, however, no perceptible change in the affairs of the family is occasioned by a death not followed by actual partition. It is only when a partition takes place that the question of tracing the succession arises. *In a Dayabhaga family there is a case of inheritance whenever a member dies the share of that member descending to his heir.*

It must not be supposed, however, that all property in India is joint property. Separate property may be acquired though it is not always easy to determine under what circumstances it is separate. But in the case of separate property there is true inheritance for which legal provision is necessary.

§ 26. Economic effects of the Laws of Inheritance and Succession in India:—A detailed discussion of the number and size of shares in ancestral and self-acquired property under both the Schools of Hindu Law can appropriately belong only to technical treatises on the matter. We are here only concerned with the broad economic effects of the Laws of Inheritance and Succession which we now pass on to notice. The result of partition and inheritance under both the Schools is *a wide-spread distribution of property*, all sons having an equal share and widows and daughters also having a limited interest in the joint property. The general principle is that the male descendants of a common ancestor through males have a greater claim than the others. In effect, if not in theory, the Mahommedan Laws of Inheritance and Succession bear a close analogy to the Hindu Law. Among the Mahommedans, though there is no presumption of jointness, the Joint Family itself is not uncommon, though under the Mahom-

* Partition is, of course, independent of death though as a general rule it takes place at the death of the father or manager if so desired.

medan Law the owner of the property—whether ancestral or self-acquired—has full control over it during his life-time only. It devolves by succession on even a larger variety of heirs than under Hindu Law. The rules of distribution of property under the Mahomedan Law depend not on consanguinity only but also on certain equitable considerations, by which the rules based on consanguinity are modified. As in Hindu Law, there is no right of primogeniture and male heirs are generally preferred to female.

In defence of the Indian Laws of Inheritance and Succession it may be urged that *the absence of primogeniture is a homage paid to the principle of equality and distributive justice*. Their tendency is to prevent great differences of wealth from arising and to promote the growth of a substantial middle class. In respect of their operation on the division of land they tend to ensure—unless carried too far—a stable rural society consisting of independent and self-respecting peasant proprietors who are regarded even in the West as the back-bone of a healthy agricultural organisation with which the welfare of the country is closely linked. From the standpoint of industrial progress, the fact that everyone gets something to start with is an advantage. The smallness of the patrimony which is the general result of an equal distribution of the property amongst the claimants is in itself a stimulus to further effort for supplementing it in order that the accustomed standard of comfort may be maintained.*

There are, however, important considerations which tell against the Laws of Inheritance prevalent in India. In the first place, they have the effect of *discouraging large-scale enterprise* by preventing the accumulation of large capital resources. Saving is difficult when the share of each individual is as small as it often is when property is equally divided. This evil, however, can be mitigated by the development of joint stock organisation of industry on the basis of limited liability which enables even small savings to be utilised for large-scale enterprises.

Another serious evil flowing from the unrestricted operation of these laws in India relates to *the excessive subdivision and fragmentation of land* resulting in uneconomic holdings and encoura-

* See Banerjea op. cit. page 43.

ging litigation, which play such a sinister role in aggravating the poverty of the peasantry.

§ 27. Is "Indian spiritualism" responsible for India's economic backwardness?—We now propose to embark on the controversy as to whether the unprogressive character of Indian society and its general economic backwardness can be attributed to Indian spiritualism.³ It is often alleged that in India "religion bids a man turn his back upon all material advantage, and if he is a Hindu, regard everything as a mere manifestation of religion;" and further that the characteristic Indian civilisation is an abiding sense of the infinite whereas economic progress implies preoccupation with the finite and the material side of life.⁴ We have to consider in the first place, whether an other-worldly attitude is enjoined by Indian religion and philosophy in a sense in which this is not true of other religions and other philosophies and secondly, we have to consider how far the road to economic progress in India is barred by the dominance of the ascetic ideal which is supposed to be held up before the masses by Indian spiritualism.

§ 28. Appeal to History:—In this connection we may, at the outset, appeal to historical evidence against the contention that Indian spiritualism has fostered a pessimistic attitude and a universal indifference to the material side of life. If the Indian mind had been exclusively taken up by thoughts of the other world as has been frequently asserted, the Indian people would not have figured in history as great empire builders, conquerors, and daring colonisers.⁵ Their remarkable achievements in all

* When we talk of "Indian spiritualism" and "Indian religion" in this context we refer to "Hindu spiritualism" and "Hindu religion." Reference to Mahommedanism is excluded because in the first place, Hinduism is the predominant faith in India and secondly, because Mahommedanism is generally recognised to be more assertive and less other-worldly in its outlook and stands less in need of defence than Hinduism.

† "Progress.....is essentially concerned with the finite, and bids a man multiply his possessions in order that he may add to his comforts. This is a doctrine that makes but little appeal to the (Indian) cultivator, who feels, with the experience of centuries, that however many his possessions, he cannot add much to his comforts in a climate that sooner or later destroys all effort and wealth." Darling: *The Punjab Peasant in Prosperity and Debt*, p. 125.

§ See Kale: *Indian Economic*, Vol I., ch. 3.

these directions have not been disputed. The theory that the Indian mind has always been preoccupied with religious and metaphysical speculation to the exclusion of all other interests is inconsistent with its admitted achievements in the sphere of the positive sciences. It is well known that the ancient Indians laid the foundations of mathematical and mechanical knowledge. "They measured the land, mapped out the heavens, traced the course of the sun and the planets through the zodiacal belt, analysed the constitution of matter and studied the nature of birds and and beasts, plants and seeds." The invention of algebra and its application to astronomy and geometry is due to the Hindus as also the numerical symbols now current everywhere in Europe. "In medicine, as in astronomy and metaphysics, the Hindus once kept pace with the most enlightened nations in the world."* Again, the world-wide fame achieved by the products of the old Indian handicrafts bear testimony to the fact that Indian spiritualism did not paralyse economic activity in the past. It is true that Indians did not invent any great mechanical appliances, and Prof. Radhakrishnan makes "a kind heaven which gave them the great water-courses and abundant supplies of food" responsible for this. Although this theory is too simple to be accepted as a complete explanation, we believe that there are sufficient grounds for rejecting the alternative hypothesis either of an inherent defect of the Indian intellect or of greater preoccupation of the Indian mind with matters of the spirit than with mundane matters. We have already seen that *the interests of Indians were by no means limited to religion and philosophy*, although they made these spheres peculiarly their own. It must further be remembered that, as pointed out by Prof. Radhakrishnan, the mechanical inventions after all belong to comparatively recent times. *Till the 18th century at least India could challenge comparison with the leading nations of the West as regards progress in the arts of material civilisation.* The fact that since then stagnation has set in cannot reasonably be attributed to the influence of Indian spiritualism. As we will see later on, there have been

* Wilson quoted by Radhakrishnan, op. cit. p. 30.

many other influences at work which offer a much more adequate and convincing explanation of this phenomenon.*

29. Influence of religious belief on Economic activity generally exaggerated:—Turning to present-day conditions, we find that it is exactly those people and communities like the Marwaris, Jains, and Bhatias among the Hindus, and the Khojas, Memons and Bohras amongst the Mohomedans who may be supposed to be most amenable to the influence of orthodox religion that have taken a prominent part in the new industrial life of the country and have shown a wonderful adaptability to Western industrialism.† *Profession of the Hindu or Mahomedan religion is, therefore, obviously not incompatible with a successful pursuit of material ends.* Even supposing that the drift of religion in India, as it is generally understood at present, is antagonistic to all forms of secular activity, its influence, so far as an average believer is concerned, is capable of being effectively counteracted *when conditions are favourable to material advance and when there is no inherent incapacity for taking full advantage of them.* The various communities like the Jains and Bhatias referred to above have certainly been helped by the existence of powerful traditions among them of business activity and enterprise dating even from pre-British days. *No religion, however unworldly its character, is able to overcome permanently the natural impulse of man to improve his economic condition.* The economic motive is at least as powerful

* "Much of the prevalent notions regarding the alleged inferiority of the Hindu genius in grappling with the problems of the mundane sphere and the extra proneness of the Indian mind to metaphysical and impractical speculations, can vanish and be proved to be the results of mal-observtion and non-observation leading to "half-truths which are really whole errors" only if we apply the historic-comparative method in studying Indian facts and phenomena. For all indologists should remember that the wonderful achievements of the Western nations are strictly speaking only a century old. So that if, while instituting a comparison between Hindu and Occidental cultures on the score of physical "sciences" properly so called and applied arts and industry, care were taken to eliminate from one's consideration the triumphs and discoveries of the last few generations, the Hindu scientific intellect would be found to have been in no way lagging behind." Max Muller: *Sacred Books of the Hindus* Vol. XVI, quoted by Kale.

† See Kale op. cit 5th Ed. p. 45. .

as the religious motive and more continuous in its operation and this is true of the East as well as of the West. It is only when the general economic outlook is hopeless, when, for example, the administration is so oppressive that it discourages every effort of creative activity, that the average man seeks the consolation of a religion preaching quietism and fatalistic resignation and uses it as a kind of anodyne which steepens his senses into forgetfulness of the evils by which he is surrounded and which he must endure because he is unable to cure them. When opportunities for ameliorating his earthly condition by positive effort present themselves, adherence to a philosophy of inaction and to a religion which would turn people away from purposeful material activity tends to become purely formal. Religion and life lose contact with each other and while paying lip-service to the formal texts of religion people come to regulate their life according to entirely different standards. Or, in the alternative, the profession of a religion reduces itself to the performance of some fixed ritual and the scrupulous observance of certain forms and ceremonies, which need not in any way hinder the ardent pursuit of wealth. Side by side with these incongruities which occur because the traditionally accepted beliefs come to be out of harmony with changed conditions, religion itself gradually undergoes a new rational synthesis and gathers into itself new conceptions which serve to bridge the gulf between belief and conduct. There is a new adjustment of emphasis so that worldly activity ceases to be regarded as inherently futile or sinful. The tendency is to preach energetic endeavour in the world instead of an ascetic withdrawal from it and to deny that there need be any sharp separation between the secular and the spiritual activity. The pursuit of material ends is recognised to be not necessarily incompatible with dreams of spiritual destiny, so that the two motives may be so interwoven in the life of an individual as to form a single strand of purpose. The modern Christian world no longer takes in a literal sense the biblical view that a rich man by reason of his riches is in a parlous state so far as his spiritual destiny is concerned,* for

* "How hardly shall they that have riches enter into the Kingdom of God !.....It is easier for a camel to go through the eye of a needle than for the rich man to enter the Kingdom of Heaven."

instance, Christian divines of the present day would be ready to allow that a man like Cadbury has as good a chance of securing a place in heaven as anyone else. For material wealth in itself is not an evil. If honestly come by, it means that the person earning it has performed some valuable service which the community thinks it worth while paying for. Both acquisition and expenditure of money can be essentially altruistic in purpose and in result.

§ 30. Fatalism a heritage from unsettled political conditions in the past:—We are strongly inclined to the view that the fatalism or other-worldiness which is regarded as the characteristic of the Indian outlook on life and as a serious hindrance to the material progress of the people is largely attributable to the conditions of political anarchy which prevailed in the country immediately before the advent of the British and which rendered impossible the normal functioning of the economic motive. When the governments were more the robbers than the protectors of the people—and this was the description to which most of the governments existing in the country answered in the chaotic times immediately preceding the establishment of British rule—when people stood to lose in a moment the fruits of years of industry by the rapacity of a chance invader or oppressive ruler, the incentive to the production and accumulation of wealth was bound to be very weak. It is natural that hope and ambition faded from the outlook of the people under these conditions and fatalism took possession of their minds.

§ 31. Process of reinterpretation of religion to harmonize it with changed conditions:—With the establishment of peace and under the influence of Western ideas and Western Science a *re-interpretation of religion on lines familiar in the West is already taking place and purposeful action is being preached more than passive endurance*.^{*} In other words, the religious outlook of a people at any

^{*}As examples of this process of re-interpretation going on in India we cull the following passages from Prof. Radhakrishnan's *Indian Philosophy* :—

"Attempts to gain solitary salvation embodying the view that one's soul is more precious than all the world's souls put together are not the ...I. E. 18

given time is more commonly the result rather than the cause of their economic condition. As the economic condition becomes more favourable it is bound to give rise to a more hopeful attitude and fatalistic doctrines are sure to recede into the background. From this standpoint it is unscientific to regard the Indian religion as a permanent obstacle in the path of economic progress, because this religion is not something stereotyped and fixed for ever, but is visibly changing in its content as well as emphasis so as to keep pace with the advance of ideas and with the promise of improved material conditions. The plastic conservatism of Indian civilisation and culture is the secret of their survival in spite of the many and powerful onslaughts on them in the course of centuries and there is no reason to suppose that they will fail to display their wonted adaptability under the present circumstances. The process of reading new meanings into old texts, of pouring new wine into old bottles, is in fact easier in the case of the Hindu religion than perhaps in that of any other religion. Unfriendly critics have said that the Hindu religion is amorphous and incapable of being pinned down to any definite set of doctrines and, therefore, "unassailable and elusive as the air invulnerable." But this is precisely also part of its strength and endows it with a wonderful capacity of adapting itself to varying conditions. Thus it comes about that, accused of inducing apathy and indifference to worldly affairs, it finds no difficulty in proving that properly understood it is not open to this accusation; that it only asks its devotees to renounce selfish endeavour but not all interest; that we are not asked to get rid of the world

expression of any genuine modesty of spirit. The Upanishads require us to work, but disinterestedly." p. 215.

"The body is not to be despised as a clog and an encumbrance to the human soul. It is a servant of the soul and not its prison and needs to be properly disciplined." p. 217.

"The false asceticism which regards life as a dream and the world as an illusion.....is foreign to the prevailing tone of Upanishads. A healthy joy in the life of the world pervades the atmosphere."

"A philosophy of resignation, an ascetic code of ethics, and a temper of languid world-weariness are an insult to the Creator of the universe, a sin against ourselves and the world has a claim on us. The Upanishads believe in God, and so believe in the world as well." p. 219.

but rather to get right with it. The late Mr. Tilak, in his monumental work "Gita-Rahasya," has made out a strong case in support of the proposition that the Bhagvadgita, the one book which can claim to be the gospel of the Hindus, distinctly prefers a life of action to that of renunciation, and in preaching action without attachment seeks to effect a reconciliation between the spiritual and material aspects of life. The doctrine of 'Karma' far from being a deterrent, is a most powerful incentive to action, because it makes man unmistakably the architect of his own fortune and points to meritorious action as the only road to salvation.

¶ As Prof. Radhakrishnan observes, "In an age when the individual was ever ready to shirk responsibility for what he did by throwing the burden on providence or stars or some other being than his own self, the doctrine of 'Karma' urged that a man "fetters himself by himself, like a bird by its nest." What looms over us is no dark fate but our own past. We are not the victims of a driving doom. Suffering is the wages of sin. There is no question that such an idea is a great incentive to good conduct."†

¶ *Indian Philosophy* : Vol 1, p. 246.

† Any attempt to trace in detail the evolution of Indian religious and philosophical thought through all its stages would be out of place here. We may, however, indicate very briefly the principal landmarks in its development. The Vedas, the earliest literature of the Aryans, can hardly be regarded as laying down any consistent and comprehensive philosophy of life being mainly concerned with the ritual of sacrifice. They are a collection of hymns in the form of prayers to the various divinities, which are really the personifications of the forces of nature, to shower on the heads of the Aryans all the blessings of material life and to ward off every evil from them. They bespeak a buoyant race full of the joy of life and intent upon making the best of the world here and now without any thought of the world hereafter. The environment in which the early Aryans found themselves in India gave them the necessary leisure for speculation and for reflection on the changes and the chances of this mortal life and these speculations are embodied in the Upanishads. "The 'how' and the 'why' of the universe and the 'where' and the 'whither' of man, these were the eternal problems which began to beat at the door of his (the Aryan's) mind and imperiously demand admission." (Lord Ronaldshay, *India: A Bird's-Eye View*, p. 295,) Thus were evolved in course of time the various systems of Hindu philosophy and the

§ 32. Other causes than religion for Indian pessimism:—In view of the foregoing discussion, we must come to the conclusion that it is necessary to look for other causes than the tendency of Indian religion and philosophy for an adequate explanation of the pessimism and submissive sadness noted by many observers as characteristic of Indian mentality. We have already spoken about the *depressing influence of long centuries of foreign domination and misrule* in India. There are, however, still other causes to take note of. In the first place, we must add the *visitations of nature* to the devastations of man to our list of causes. The climate of India, especially in those parts which are excessively damp and hot, has an enervating influence on the human frame, which on that account becomes peculiarly liable to diseases rampant in the tropics such as malaria, plague and hook-worm. Some of these diseases like the hook-worm, apart from the heavy toll of life they claim, lead to a general lowering of vitality and to a feeling of chronic apathy—a condition under which a buoyant hopeful outlook on life becomes impossible.* There is thus a physiological basis for pessimism which must not be over-looked.

characteristic doctrines of Hinduism, viz. those of Karma and Transmigration, according to which every action, good or bad, is by an unalterable law followed by its legitimate and just consequences pursuing man in birth after birth. This prospect of an endless chain of births and deaths from which apparently there was no escape has been alleged by some (e. g. Lord Ronaldshay) to be the root-cause of Indian pessimism and indifference towards material life and to have supplied a rational basis for asceticism and renunciation, which seemed to offer the only prospect of a release from the eternal round of births and rebirths. As has been suggested above, the doctrine of 'Karma' is capable of quite a different interpretation viz. that the path of self-less and strenuous action rather than that of renunciation is the one which leads to the goal of salvation. The one great revolt from Orthodox Hinduism represented by Buddhism preached the philosophy of "Niravana"—a calm and sinless state or condition of the mind reached by the extinction of sin and desire—and may have introduced a taint of pessimism into the Indian outlook on life. Even supposing, however, that this is a fair interpretation of Buddhist philosophy (which we have no doubt its modern exponents would hotly dispute) we must remember that Buddhism was hounded out of the land by Hinduism and its influence was merely of a temporary character.

* See Lord Ronaldshay : op. cit. ch. XXII.

Again, we must consider the influence of calamities like * famines to which an agricultural country like India dependent upon a freakish monsoon is necessarily exposed and which in the past could not be tackled by the creation of an effective machinery of famine insurance and relief. This position of utter helplessness in the face of a recurrent calamity of this character must have been a potent cause responsible for an attitude of hopelessness and a fatalistic spirit of resignation among the people.

The twin tragedies of disease and famine which have been enacted frequently in the past on the Indian stage and which have by no means altogether ceased to be enacted even today, go a long way to explain the brooding malancholy of the people. Another possible explanation may lie in the numerous *disabilities inflicted in a caste-ridden society, particularly on the lower castes*, shutting out large masses of the people from any prospect of social and economic amelioration and condemning them without hope of release to the fate of helots.

In discussing the causes of Indian pessimism we must not forget that even in Western Europe, the permeation of the masses with a spirit of hopefulness and acquisitiveness is a comparatively recent phenomenon and is largely due to the great practical achievements of modern science. Before the modern scientific era, great natural calamities like famines and visitations of epidemics like plague and cholera were looked upon as indications of the wrath of Heaven against which it was useless for weak mortals to struggle and the so-called Oriental fatalism at one time coloured the views of the masses in Europe also. If this attitude of helplessness and resignation has largely disappeared in Europe, it is because with the help of science in its protean manifestations in the progress of medicine, in the development of communications etc., man has come to have the feeling of growing mastery over nature and from the vantage point of triumphs already gained, regards every evil to which he is at present subject as remediable by persistent human effort. A similar change in outlook has already commenced in India and

we have no doubt that with the spread of general education and enlightenment, with the progress of practical science and the steady pursuit of a policy of national economic development, the existing causes of Indian pessimism will be removed and the country placed on the high road to material progress and prosperity.

CHAPTER V.

ECONOMIC TRANSITION IN INDIA.

§ 1. Industrial Revolution in England:—In this chapter we propose to take a survey of the fundamental changes in the economic structure and organisation which have transformed conditions of life and labour in this country during the last hundred years or so. The forces in operation have been (partly) those summed up in the phrase, "Industrial Revolution." In order to understand the nature of these forces it will be helpful to trace briefly the course of the Industrial Revolution in England.

The Industrial Revolution of England although catastrophic in one sense, was, in another, the outcome of forces which had been in operation for nearly two hundred years before they came to a head and acquired a sufficient momentum about the middle of the 18th century for causing those spectacular changes with which the name Industrial Revolution is particularly associated. There were many *reasons why England was the most likely theatre for the Industrial Revolution to make its first appearance*. The commercial Revolution of the 16th and 17th centuries caused by the *discovery of America and the all-sea route to India* was a necessary preliminary to the later Industrial Revolution, because it transformed the scale and nature of international commerce and opened world-wide markets to absorb the enormous output of commodities due to the mechanical inventions of the Industrial Revolution. The theory of commercial monopoly characteristic of the Mercantilist policy of the countries of Western Europe had led to a series of *wars of economic nationalism* in the 17th and 18th centuries, and while England had emerged triumphant from them as a strong naval and commercial power, England's rivals had come out with crippled resources and industries. This added enormously to her competitive strength. The Industrial Revolution in England, again, synchronised with the *firm establishment of British power in India* and the opening of the large markets of India acted as a powerful phillip to the new Lanca-

shire cotton industry. Various other factors had favoured the progress of the new movement in England, for example, the insularity of England, making her immune¹⁰¹ to the ravages of war within her borders; the establishment of internal free trade; the supremacy of the common law avoiding in a large measure the evils of feudalism and class discontent; the establishment of a parliamentary form of Government dominated by a landed aristocracy with a strong industrial and commercial bent, the healthy mistrust of state regulation engendered by the memories of the Stuart despotism; a policy of religious toleration which welcomed the immigration of skilled foreign artisans and the opportune development of banking and credit. The stagnation in religion and politics, central and local, in the 18th century England further helped the concentration of attention on industry and stimulated mechanical inventions into whose service were pressed the ardour and imagination already fired by the discoveries of physical science and the revival of mathematics.²

§ 2. Four main features of the Industrial Revolution in England:—The English Industrial Revolution had four main features, revolution in agriculture, in transport, in industry and in economic thought and policy—all acting and reacting on each other. The change began in agriculture in response to the demand for more food on the part of the growing population of England and the wasteful mediaeval methods of the common-field husbandry were replaced by a new system of land tenure and a much more efficient agriculture. The advance in agricultural science and the exigencies of a scientific husbandry led to the second Enclosure movement which caused the disappearance of the yeomanry and the emergence of a class of landless labourers and a class of capitalist tenant farmers employing them. Thus arose the present triple division of the big landlord, the capitalist farmer, and the landless agricultural labourer. In the sphere of transport and industry the revolution manifested itself in the improved means of communication—turnpike roads and navigable canals—in the introduction of a variety of inventions in the coal, iron and textile industries, notably the spinning jenny, the power loom and the steam engine and the establi-

* The Hammonds : ' *Rise of Modern Industry*. ' pp. 64-65.

ishment of the factory system which involved production on a large scale and the supplanting of human labour by machinery about 1825, started another revolution in transport methods and communications which in the fulness of time brought the railway, the steamship and the telegraph. Starting with the textiles, coal-mining and iron, the Industrial Revolution gradually spread to other manufactures and its progress was facilitated by the organisation of joint-stock companies with limited liability and the extension of credit and banking.

In sympathy with these changes, economic thought from the time of Adam Smith onwards took a new direction based on the principle of natural liberty and individual enterprise as opposed to the old system of detailed state regulation of the economic life of the nation, against which Adam Smith's 'Wealth of Nations,' was in great part a well-reasoned and powerful protest. The new economic school adopted "*Laissez Faire*" as its motto and was responsible for the wholesale repeal by Parliament of the old regulative statutes in regard to wages, apprenticeship etc., which removed all obstacles in the way of capitalistic enterprise and free competition and greatly hastened the pace of the Industrial Revolution. Incidentally, we may point out that the extreme "*Laissez Faire*" policy, while it accelerated the progress of the Industrial Revolution, aggravated the evils of the period of transition, liable from any revolutionary change and postponed the removal of many social and economic grievances which had arisen mainly from the Industrial Revolution.

§ 3. Results of the Industrial Revolution :—The results of the Industrial Revolution were striking. There was an immense increase in the production of wealth, a vast extension of internal and external trade, a tremendous movement of the population from the South to the North of England along with a rapid increase in the total numbers and fundamental changes in the social and economic organisation, with the balance of social and political power shifted in favour of the capitalist classes to the detriment of the working classes both in the field of agriculture and industry. Domestic industry was

supplanted by the large-scale factory with its thousands of "hands" connected with the capitalist by no other bond than the cash nexus which took the place of the old human relations between master and workmen. The concentration of capital and instruments of production in the hands of a small moneyed class led to a divorce between the working and owning classes and split society into two hostile camps at war with each other. The insecure and precarious life of the labourer living under an ever-present threat of unemployment, the frequent strikes and lock-outs throwing society out of gear and the dislocation of the economic equilibrium owing to recurring crises came to be the features of the new industrial order and society was faced with new and complex social, political and economic problems.

§ 4. Morison's classification : the old type and the new type of countries :*—We have now to see how far these changes had their counterpart in India and we shall begin our discussion of economic transition in India with Morison's division of the countries of the world into two broad categories viz. (i) those belonging to the old economic order that have not yet passed through their industrial revolution and (ii) those belonging to the new economic type that have completed their industrial revolution. The first type of countries may be illustrated by Egypt, some countries of Europe and India, in which the old organisation of industry remains practically unaffected by new changes. The second type of countries may be illustrated by England, France, Germany and the U. S. A., where the old archaic organisation has been completely replaced by new methods of production and distribution. This is, however, only a rough classification, for there is no sharp line of demarcation between the two categories. Most of the countries in the first category are showing a tendency to pass into the second one and in some of them the change is already plainly visible. For our present purpose, India and England may be taken as representing the two economic types. *India still for the most part belongs to the old economic order though the signs are already set in favour of her transition to the second type.* England may be said to have completed her industrial revolution which has influenced conditions of

* See Morison, 'Economic Transition in India' pp. 1-3.

life and labour there perhaps more profoundly than anywhere else. The old industrial organisation was the result of certain physical conditions, which at one time or other, prevailed practically in every country in the world, and wherever they existed the economic type produced by them was more or less uniform.

§ 5. Characteristics of the old order:—The characteristics of the first type of countries, that is, those belonging to the old economic order, are as follows:—(1) The predominance of custom and status over competition and contract. (2) The isolation of small groups of the population as in the villages and their economic self-sufficiency primarily due to defective transport and communication. (3) The preponderance of agriculture over other occupations resulting in an uneven distribution of the population between the various occupations and the consequent predominance of the rural over the urban population. (4) Simple and imperfect division of labour due to the narrow size of the market. (5) Small-scale industry of the handicrafts and cottage industry type carried on independently by the artisan himself and hence the smallness of the capital engaged in industry and the absence of the middleman manager or entrepreneur. (6) Absence of money economy and prevalence of barter or direct exchange of goods against goods. (7) Undeveloped credit and prevalence of usury.

§ 6. Characteristics of the new order:—In contrast with these are the following characteristics of the second type of countries, that is, those belonging to the new economic order:—(1) Freedom of contract and free play of competition. (2) Close interdependence between the different parts of the industrial world made possible by highly developed transport and communications. (3) A comparatively even distribution of the population amongst the various occupations with agriculture occupying a relatively unimportant position and the consequent predominance of the urban over the rural population. (4) A more complex and perfect division of labour facilitated by the wide and growing extent of the market and the large and increasing use of machinery. (5) Industry organised on a large scale requiring the use of huge capital resources and directed by a few expert entrepreneurs; concentration of labour in large factories and manufacturing centres and the disappearance of personal relations between the workman and

the capitalist. (6) Displacement of barter by money economy. (7) Development of credit and banking and absence of usury.

India, at the present time, is in a state of economic transition and exhibits in varying degrees characteristics appertaining to both types of countries. She may be said to be marching in uneven stages through the centuries, for while some parts are, economically speaking mediaeval, if not primitive, others have definitely entered on the modern stadium and display a full development of economic conditions found in the most advanced countries of Western Europe. The trend of development, however, is towards a growing predominance of the second type described above.

The Old Economic Organisation.

§ 7. The village :—In order to understand the nature of the change that has been wrought in India it is necessary to describe in some detail the old economic organisation as it existed before the new forces were let loose upon it.

The first important feature of the old economic order in India is the division of the country into villages where the large majority of the people lived and continue to live today. The isolated and self-sufficient village was the unit of the old Indian economy and as Morison puts it, "it is to the village that we must go to study the conditions in which men live and work who are still under the old dispensation."

§ 8. How the village arose and why it persists :—Various hypotheses have been suggested in explanation of the particular mode of settlement known as the village. The difficult task of clearing the jungle for cultivation may have compelled what was originally a nomadic tribe or clan, to stick to one spot for purposes of effective co-operation. A second influential factor may have been the supply of water. If water was not freely available everywhere within a given area, those parts where it was abundant would naturally be chosen for concentration. Another factor cementing this concentration must have been the need for securing protection from hostile tribes and the wild beasts of the jungle.

* Morison, 'Economic Transition in India,' p. 34.

The village community in India is by no means without parallel in other parts of the world,—the Mediaeval Manor in England, the German Mark and the Russian Mir are obvious parallels—but the enduring quality of the village organisation in India and its persistence in the face of numerous political vicissitudes through which the country has passed, have often been noted as a peculiarly Indian characteristic, especially by foreign observers and glowing descriptions have been given of the arcadian simplicity and happiness supposed to have ruled supreme in the old Indian village community.*

The idea, however, that the village was able to live its own life entirely unaffected by wars and revolutions outside must be accepted with much reservation and qualification.† When, for example, during the 18th century, the whole country was a theatre of constant warfare and brigandage, it is unthinkable that the villages should have been allowed to pursue the even tenor of their life entirely undisturbed. As a general rule, they were forced to rely on themselves for defence against aggression. Occasionally, we may suppose, they succeeded in warding off the attacks, but often the enemy was too powerful and successful resistance was impossible. Rapine and plunder, exaction and extortion must have rudely disturbed the economy from time to time and recovery must often have been a slow and painful process. It is well to bear in mind these considerations so as to furnish a corrective to the impression fostered by careless writers that the villages lived a happy and peaceful life unruffled by the commotion of wars and revolutions round about them. The political chaos that came to prevail in the country with the break-up of the Mogul Empire could not have failed to carry its baneful influence into the villages whose economic life must have been

* The reader will recall the following oft-quoted passage from Sir Charles Metcalf:—"The village communities are little republics having nearly everything they want within themselves; and almost independent of foreign relations. They seem to last where nothing else lasts. This union of the village communities, each one forming a separate little state in itself.....is in a high degree conducive to their happiness, and to the enjoyment of a great portion of freedom and independence."

† Cf. Altekar: *A History of Village Communities in Western India*, pp. 105-106.

subjected to severe and repeated shocks. The fact that village organisation remained practically unaltered for centuries must rather be attributed to certain persistent factors, such as lack of communications and the consequent absence of an effectively centralised system of administration, than to any inherent virtue in the Indian village making for its survival.

§ 9. The typical Indian village :—After this somewhat long digression, we shall turn to a description of the old village in India. The typical Indian village is an aggregate of cultivated holdings with or without some waste area attached to it and usually it has a central site where the dwelling houses are congregated together, with the lands of the village spreading round about the central site in a series of concentric circles. In some cases, small homesteads and farm buildings are found separately located on the holdings, though for better security and other reasons it is usual for the cultivator to stay in his house in the village dwelling area. The village often boasts of a grove and some kind of public office where the village officers keep their books and dispose of their business.*

§ 10. Village organization :—Turning to the village organisation, we may leave aside for the time being the difference between the two principal forms of village constitution in India viz. the Rayatwari or severalty and the Joint village, and attempt here only a generalised description indicating the features common to both. Each village was an entirely self-sufficient economic unit containing within its bounds all the labour, capital and skill necessary for the agricultural and industrial activities of the village. The inhabitants of the village may be divided into three groups, the agriculturists, the village officers, and the village artisans and menials. The agriculturists themselves may be divided into the landowning and the tenant classes constituting together the most important section of the village community. The actual cultivators, whether proprietors or tenants, cultivate mostly small open fields, (reminiscent of the common fields without enclosures of the English village before the agricultural revolution) with such labour as they themselves, assisted by their families, could supply

* See Baden Powell : *Land Revenue in British India*, p. 66.

and only occasionally with hired labour. They provide the small capital that they need from their own savings or from the village landlord or more commonly the village money-lender. They undertake the risks of cultivation, are themselves the managers, organisers and experts of their petty farms and personally carry whatever produce they can spare to the nearest market exchanging it for salt and other small necessities and luxuries not available within the village itself.[§]

§ 11. The village officers:—Each village has its own officers and in fact the village was and to this day remains the unit of administration in India. Amongst the village officers we must first mention the headman or the Patel who is a person of great importance in Rayatwari villages. He is a hereditary officer responsible for the peace and order of the village and the collection of revenue and often discharges petty magisterial duties. He holds a plot of land called 'Watan' land—by way of remuneration for his services. Then there is the village accountant or scribe styled the Patwari or Kulkarni who keeps the village records and accounts. There is also a watchman or Choukidar who has to report crime, arrest offenders and help the police. Lastly, there is the village messenger. These village dignitaries, sometimes called the 'Alutes,' may be distinguished from the 'Balutes'[†] or the village servants-artisans and menials—who con-

§ See Morison: op., cit. ch. II and also Banerjee: op. cit., ch. VI.

† Grant Duff mentions the following classification in the History of the Marathas, Vol 1, p 31. Balutes.—The head of the twelve Balutes is the carpenter. After him come, the blacksmith; the shoemaker; the Mahar or Dhed who acts as a scout, guide and watchman and is the principal guardian of the village boundaries; the Mang, who makes leather ropes, thongs, whips, etc. used by the cultivators and also frequently acts as a watchman; the potter; the barber, the washerman; the Gurav, who looks after the idols in the village temple; the astrologer; Bhat or bard; the Maulana or Mullah or Mahommedan priest;

Alutes:—the goldsmith, the Jangam or Guru of the Lingayats; the tailor; the water-carrier; the Tural or Yeskur, who is a Mahar with miscellaneous duties and who never quits the boundary of the village; the gardener, the Dowree Gosavi, a religious personage who beats the Dour, a species of small tambourin, the Gursee or piper, the Ramoshi or Bhil, the oil-man, the Tamboli, or pan leaf vendor, the Gondhali or beater of the Tambhat or a double kettle-drum.

stitute the third group of village residents. Besides these village officials most villages had in the old days their Panchayats or bodies of village elders who served as cheap and efficient arbitration courts of justice and otherwise held the village community together.

§ 12. The village artisans:--We may now consider the status and functions of the village artisans and menials. Almost every village possessed, in the old days, its complement of artisans such as a carpenter, a blacksmith, a potter, a barber-surgeon, a cobbler, a washerman, a goldsmith, the petty shopkeeper, the oilman, etc. The village had also its holy man, be he astrologer, priest or Fakir. In larger villages there may be a weaver, and there is practically in every village a money-lender, who often combines the functions of money-lender and wholesale grain-dealer. The artisans are the servants of the village and are hereditary in character, being rarely paid by the job. They are given houses in the village and look after the needs of all the villagers who only provide or pay for the materials employed. Their labour is rewarded by regular annual remuneration of service land or an allowance in grain paid at the harvest. Those artisans, however, whose services were only occasionally required, such as the weaver, are paid by the job. It is only for such things as the supply of a sugar-press or cart that a regular village servant like the carpenter receives extra payment. Thus in the words of the Census Report of 1901, "The peculiar feature of Indian rural life is the way in which each village is provided with a complete equipment of artisans and menials so that until the recent introduction of the Western commodities such as machine-made cloth, kerosine oil, umbrellas, and the like, it was almost self-supporting and independent excepting in the matter of salt and a few other luxuries purchased at the village fair or brought in by the Lamans or caravans."[†]

§ 13. Self-sufficiency and isolation of the village: Prior to the construction of roads and railways the village community had scarcely any contact with the outside world except for the occa-

* See Baden Powell op. cit. p. 69

† See Gadgil: *Industrial Evolution of India*, p. 11

sional visits of the grain or cloth merchant who carried the surplus of one village to make good the deficiency of another or for the very occasional journey to some big centre of trade for selling the products of his craftsmanship. The self-sufficiency of the village was forced upon it by its being cut off from contact with the outside world. As Morison remarks, "When water carriage is impossible and wheeled traffic slow and untrustworthy, exchanges are confined to those things which can be carried by men and pack animals." In India of the early 19th century there were only a few natural waterways like the Ganges and the Indus and road transport was defective and almost as bad as in the England of the early 18th century described by Arthur Young. Proper roads hardly existed except a few such as those constructed by the Moguls and where they did exist, their condition was often highly unsatisfactory and they were infested by highwaymen and robbers. The East India Company did little to improve the roads being concerned more with dividends than with administration. Internal trade, therefore, remained undeveloped. Being thus almost completely isolated from the rest of the world the village was compelled to make its own standing arrangements for satisfying all its requirements and it did this by attracting the requisite staff of artisans by offering them homes and regular remuneration. In normal times, the village did not suffer owing to lack of communications, because its organisation took account of this disability and was designed to overcome it. In times of famine, however, lack of transport facilities prevented the distribution of corn from regions of plenty to those of scarcity causing acute distress in the latter. This is the obvious explanation of the most astonishing variations of prices even in adjoining villages which were so near and yet so far for lack of transport. The village grain-stores, however, insured the people against scarcity provided it was of moderate duration. As the market for the goods turned out by the village artisans was narrow it prevented any but the most imperfect division of labour. The advantages of specialisation had largely to be foregone and there was a great waste of time and skill with the result that the condition of rural industry was very backward.* The praise that

* See Gadgil, *op. cit.*, p. 13

is ususally showered on the exquisite products of Indian craftsmanship belongs of right to the urban industries of the old days, and not to the industries that were carried on in the village.

§ 14. Absence of money etc. :—Another feature of village life that needs to be emphasised was, that until recently the use of money was rare, whether for effecting exchanges or remunerating services. In fact, the need for money is rarely felt in a self-sufficing community which has only a few exchanges to make with the outside world.* Agriculture being the most important industry of the village, *grain was the standard of value* and it was used by the villagers in their exchanges with each other. Grain was universally desired and its bulkiness did not matter so far as the exchanges within the village itself were concerned. Land was the only thing which was desired to the same extent as grain and its possession being regarded as the hall-mark of superior status in the village, it was used for remunerating the services especially of the more important servants of the village like the Patel.† The rate at which these payments were made was determined by a minute and complicated but well understood set of village customs. Custom rather than competition was the principal regulator of this as well as other economic relations in the village.§

Immobility of labour and conservatism of the village people was an even more pronounced characteristic in the old days than now, though there was a stronger sense of unity and solidarity, the

* The scarcity of money, however, must have been felt as an inconvenience to the extent to which payment of land revenue in cash was insisted upon by Government. The peasant would then have to sell part of his produce and in this matter his position was, if possible, weaker than under present conditions. Transport being difficult and dangerous merchants probably required a much wider margin between their buying and selling prices and as the export trade in raw materials had not yet developed the peasant was, on the whole, even less advantageously situated than now in obtaining the best possible price for his goods.

† See Morison: op. cit. p. 45.

§ See Sections 15 to 18 below.

practical disappearance of which is one of the most disquieting features of the present situation.

The above description of the village system must not of course be taken as an entirely faithful picture of conditions actually prevalent today. The village, like so much else in the old economic organisation of the country, has undergone a considerable change—and in some respects fundamental change—in response to the new factors that have made their appearance during the last hundred years or so. The old organisation is, however, still far from being completely superseded by an entirely new one, and through all the change and adaptation that has taken place it is still possible to discern clearly the lineaments of the old village system in its pure form. The village in transition will form the subject of more detailed discussion later in the chapter.

§ 15. Custom and Status:—We have already referred to Ranade's opinion that in India "there is neither the desire nor the aptitude for free and unlimited competition except within certain narrow grooves. Custom and state regulation are far more powerful than competition, and status is more decisive in its influence than contract."[†] Custom and status were fostered by the stationary character of the Indian civilisation, the conservative instincts of the people and more especially by natural economy or barter. Dr. Cunningham connects barter with custom and money with competition. "So long as barter prevails there are likely to be customary payments of rent, wages and taxes; but as money is introduced there may be frequent changes of these payments and they come to be settled by competition."

Our study of the Indian Caste System and Joint Family has already given us an idea of the power of these institutions in determining for the individual, his career in life and the whole course of his social and domestic relations. So long as these institutions were not appreciably affected by modern influences, the individual was not a free agent and had no freedom of contract in the matter of choosing his occupation, his standard of living, his residence etc. Birth in a particular caste and family

[†] See p. 6, Chap. I.

fixed his status in society irrevocably, for good or for ill, from which there was no escape possible. The individual was compelled to fit in as best he could with the position determined for him by the accident of his birth.

Historically, custom has played a very important part in determining economic relations of all kinds and it reigned supreme even in Europe before the Industrial Revolution as under the Manorial and the Guild system. *It is only in comparatively recent times that competition has replaced custom.* In much the same way, custom rather than competition determined rent, wages and prices under the old economic order in India. Custom may be regarded as mere convention based on the force of habit and the essential idea of custom is resistance to change of any kind for no other reason than that it is change. Even under the so-called regime of custom, however, the silent force of competition masked as changed custom is plainly visible. Custom cannot for long remain out of conformity with competition for as Morison remarks, "competition is only another name for that struggle for existence which runs through all animate nature..... As a matter of fact, the antagonism between competition and custom is often exaggerated; it will generally be found that in practice, they do not produce very dissimilar results. When they diverge, custom is usually altered to bring it into harmony with the practical requirements of the case.*" The antithesis between custom and competition is based on the degree and ease of adaptation to changing conditions. What is really meant by it is, that under custom change is difficult and is attended with much greater friction than under competition. It is not implied that under custom change does not take place at all. Where mobility of labour and capital is perfect competition will prevail, whereas custom will be predominant in the absence of this mobility. In connection with the influence of custom, Mill points out that it is often the powerful protector of the weak against the strong and their sole protector where there are no laws or government. On the other hand, custom very often means, habitual suppression of the weak in favour of the strong, as in the case of the guild and the caste or under the

* *Economic Transition*, p. 54.

feudal system. It tends to repress the individual and to subordinate him to the community in a greater degree than is desirable.

§ 16. Custom and Rent—We may now go on to notice the influence of custom on the various economic relations in the old days.

The rents paid by the cultivators to the landlord were largely customary varying little from generation to generation. Before, however, attributing the whole of the phenomenon of stationary rents to custom we must take cognisance of certain special circumstances which even under competition would have made for the immobility of rents. For instance, in the old days in India, owing to its relative abundance, it was land that ran after tenants rather than the tenants after the land as is now the case; the explanation of this state of affairs being at least partially the fact that the tenant was not always certain, owing to conditions of political insecurity, of being able to reap the legitimate fruit of his labour in cultivating the land. Moreover, the tenants came in handy to the landlord as his retainers under conditions of perennial warfare. It was precisely because of the prevalent conditions of insecurity, however, that the tenants could not drive a hard bargain with the landlord who was their natural protector and in whose strength and prosperity lay their safety.* These circumstances established an equitable and mutually profitable relationship between landlord and tenant. When, however, conditions in these respects improved, the landlord did not fail to raise the customary rents, the change being none the less real for being concealed by the ingenious plan of levying extra cesses on the land.

§ 17. Custom and wages:—As regards wages, to the very small extent to which hired labour was employed at all for the cultivation of land, there were certain recognised customs which regulated the remuneration of labour, the usual plan being that the labourer was supplied with board and lodging in the house of his employer or received fixed payments in kind. The labour was engaged for a long period, generally by the year. We have already seen that the remuneration of the rural artisans for

* Cf. Martin Leake: *The Foundations of Indian Agriculture* p. 130

services rendered to the village community took the form of certain customary payments in the shape of annual grain allowances received from every cultivator at the threshing floor. The plan on the whole worked well from the point of view of both the parties concerned. The payments were elastic as they varied with the nature of the harvest from year to year and being payments in kind the modern complication of a disparity between real and nominal wages due to changes in the purchasing power of money did not arise.

§ 18. Custom and Prices:—Payments in money for goods purchased were the exception rather than the rule. In so far, however, as they did occur, in normal years, custom was sufficiently powerful to regulate them; it could not well be otherwise in an environment where practically all transactions in the village came under the influence of custom. But in abnormal years, custom was overborne by competition so that prices soared enormously high in years of scarcity and came down like a rocket in years of plenty. There were no moderating influences operating from outside on these local fluctuations, as the village had practically no access to the outside markets on account of defective transport. There could obviously be no such thing as a uniform level of competitive prices for the whole country in the absence of wide, well-organised and sensitive markets and we have already had occasion to remark that there were often astonishing variations in prices even in adjoining villages.

§ 19. * Towns under the old economic order in India:—Although we have no reliable statistics to prove it, there is reason to believe that *about 10% of the population lived in towns in India at the beginning of the last century. This proportion was higher than in some of the contemporary countries of Europe such as France or Russia.* It must also be remembered that the industrial population in India was then largely distributed also in villages and it has been suggested that *about 40% of the population was dependent upon rural and urban industries and 60% on agriculture.*

* For our account of towns we have largely drawn on Dr. Gadgil's *Industrial Evolution of India*.

The origin and prosperity of most of the old Indian towns may be traced to the three following reasons. (i) They were *places of pilgrimage* or sacred places of some sort like Allahabad, Benares, Gaya, Nasik Puri; or (ii) they were *the seats of a court or the capital of a province* like Delhi, Lucknow, Lahore, Poona, Tanjore, Arcot; or (iii) they were *commercial depots*, owing their existence to their favourable position along trade routes such as Mirzapur, Bangalore, Hubli etc.

Of these the sacred places and capital towns were more important than the commercial towns. In the holy towns such as Benares, there prospered brass, copperware and bell-metal industries turning out sacred utensils and vessels for which there was a ready demand from the pilgrims. The court towns also were by no means negligible. They were numerous and arose not only in connection with the imperial courts but also with those of petty chieftains or Nabobs. Their prosperity obviously depended upon that of the patronising court and they decayed with its removal or collapse as in the case of the old Deccan capitals now in ruins, such as Deogiri, Paithan, Bijapur and Vijayanagar. In this class of towns, luxury industries predominated; for example, fine textiles, embroideries, gold and silver work, ivory and many other artistic handicrafts which then had attained the pinnacle of their glory and called forth the admiration of all lovers of art. The trading towns owed their importance to their advantageous position along trade routes and rose from their humble origin as cross-road villages. However, as the internal as also the external trade of India during this period was not very large, the importance of this class of towns was restricted: but their position was more stable than that of those dependent upon the prosperity of courts.

The main features of town life even then were naturally different from those of life in the village communities. They had larger populations which depended on the imported supplies of corn from the neighbouring villages. They displayed a greater variety of trades and occupations and possessed a better organization of industry and wider markets. They were characterized by a greater frequency of cash payments and enjoyed

larger freedom in consumption and more efficient organization of credit. From very early times the collection of goods and their subsequent distribution by sale had reached a high degree of development in India. The use of indigenous credit instruments such as Hundis or bills of exchange drawn by one banker or trader upon another, implied a considerable organization for trade purposes and we know that money was thus transferred with facility from one account to another all over India. The great commercial houses of course dealt not only in money but also in wares; there were, for instance, in Mirzapur and Benares dealers who collected goods and distributed them over a very considerable area.*

§ 20. Indian Industries in the past:—It is sometimes said that India has never been an industrial country and that nature has destined her to be an agricultural country. Now, if by this statement it is meant that agriculture has always been an important industry in India, this need not be disputed. Further, if it is meant that India has not been an industrial country in the modern sense of the term, this also may be conceded, though it is necessary to observe that even England and other highly industrialised countries of today were, at a not very remote stage of their economic evolution, in the same position as India at the present time. If it is, however, implied that there were never any considerable industries in India apart from agriculture, it is easy to disprove such a statement by an appeal to her past history. § As the Industrial Commission (1918) observe, "At a time when the West of Europe, the birth-place of the modern industrial system, was inhabited by uncivilised tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen. And even at a much later period, when the merchant adventurers from the West made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the more advanced European nations."† "The skill of the Indians," says Professor Weber, "in the production of delicate woven fabrics, in the mixing of

* See Morison, op. cit., pp. 167-168.

§ See the works of Romesh Chandra Dutt and H. H. Wilson.

† Industrial Commission's Report, p. 1.

of colours, the working of metals and precious stones and in all manner of technical arts has from very early times enjoyed a world-wide celebrity".* Egyptian mummies dating from 2,000 B. C. have been found wrapped in Indian muslin of the finest quality. Rome consumed Indian manufactures on a large scale and the Dacca muslins were known to the Greeks as the Gangetika. The iron industry also had attained a high level of progress as shown by the famous cast-iron pillar near Delhi. This industry "not only supplied all local wants but also enabled India to export its finished products to foreign countries."† [India was likewise famous for her silk manufactures, her woollen shawls, boxes of sandalwood and cutlery. Many a foreign traveller has paid a glowing tribute to her flourishing arts and industries. The successive waves of foreign conquest which commenced from the 11th century must have greatly hampered the development of Indian industries for some time. The return of stable conditions, however, especially under Akbar seems to have fully revived them. Indian cotton goods as well as silk goods were exported in substantial quantities to Persia, Syria, etc. It was this trade and prosperity that attracted the European traders to India. Their rivalry to secure a footing in India at that time was occasioned not by the abundance of the materials of the country but by the value and variety of its manufactures and crafts. It was the fine linens and calicoes, the jewels and embroideries, woollen and silk manufactures, which supplied the basis for the lucrative trade of the East India Company.]

[The urban industry at the beginning of the last century consisted of workshops producing fine textiles and other luxury goods for the domestic market. It was far better organised than the rural industry and was the first to be exposed to the full blast of foreign competition. The chief industry was, of course, the textile handicrafts and among them the cotton industry

* Industrial Commission's Report, Minute of Dissent, p. 295.

† *Essays on Indian Economics*, p. 171.

† Dr. B. N. Datta's Minute of Dissent, Industrial Commission's Report, pp. 20-21.

was easily the first and was to be found all over India. As R. C. Dutt observes, "Weaving was the national industry of the people and spinning was the pursuit of millions of women." The more important centres of the cotton industry were Dacca, Lucknow, Ahmedabad, Nagpur and Madura. The most famous woollen products were the (Kashmir shawls, not however, confined to Kashmir alone but produced in several other towns of the Punjab. (Then there were the metal industries turning out brass, copper and bell-metal wares, the chief centres for which were Benares, Nasik, Poona, Ahmedabad, Vizagapattam and Tanjore. The industry was, however, spread all over India. (Arms and shields were manufactured in the Punjab and Sind. The towns of Rajputana specialised in all kinds of artistic works like enamelled jewellery, stone carving etc. There were also other crafts like gold and silver thread, marble work, sandalwood work, glass and ornamental rings, tanning and leather works, paper-making and perfumery.* The ship-building industry was a few years ago in a sufficiently prosperous condition to excite the interest of English shipping interests and was favoured by the natural advantage enjoyed by India of large supplies of good timber which was an important consideration before the days of iron-built steamships.

The urban crafts were organised into trade guilds upon a caste basis for hereditary occupations. These guilds served as mutual societies, governed membership, conditions and quality of work. There was a good deal of division of labour and some degree of localisation of industries as illustrated above, though every important city had a fair representation of the different handicrafts. Thus the urban crafts were better organised than the rural non-agricultural industry. In the case of handicrafts everywhere, the independent craftsman was not a big capitalist. He generally worked to order the materials being usually provided by his customers. The artisan living as he did under the domestic system of industry was able with the help of his family to learn the secrets of his occupation from his father and to enjoy the advantage of an assured position associated in those days with hereditary family trades. There can be no question of the posi-

* See Gadgil: *Industrial Evolution of India*, pp. 37-39,

tion of the artisan was more prosperous than at present, on account of the assured demand for his wares. However, it is easy to paint too rosy a picture of his economic position. For example, the weaver was not generally able to reap the whole benefit from the keen demand for his wares. A good deal of this benefit was intercepted by the middleman employer who advanced money to the weaver and had often the ability, as he generally had the wealth, to exploit the decay of Indian industries. The rural line of the handicrafts, though it began to decline at the end of the 18th century, became very marked about the middle of the 19th century and it can be attributed to the following causes:—

(i) *The disappearance of the indigenous courts*:—The disappearance of the patronage of the courts and of the nobility meant the cessation of the main demand for the products of the handicrafts and hence their decline. For instance, the prosperity of the cotton and silk manufactures of Bengal had largely depended on the existence of the great Mogul Empire with courts at Agra, Delhi and Lahore; and with the break-up of that Empire which commenced after the death of Aurangzeb the Bengal manufactures naturally began to dwindle.* The process of the disappearance of the patronage of the courts and of the nobility was considerably accelerated by the extension of British power and hastened the decay of the industries that depended upon it, e. g. at Lucknow and Tanjore.

(ii) *The operation of adverse foreign influences*:—† The introduction of British rule indirectly weakened the power of the guilds and other bodies which regulated the trade and supervised the quality of the materials used. The disarming of the population and the establishment of peace unfavourably reacted on industries turning out arms and weapons. The European official and the foreign tourist and the newly educated professional class of Indians were the natural successors of the people whose patronage had kept up the handicrafts. Although the European in

ordinarily preferred goods imported from Europe, there was even as a certain amount of European demand for these

England: Ireland: India from Akbar to Aurangzeb,

own: Madgil : op. cit. pp. 41-46.

addition

handicrafts which helped to arrest their decay. But the introduction of new forms and patterns to suit the European taste and the increasing demand for cheap goods prejudicially affected the quality and workmanship of Indian handicrafts. The educated professional class as a whole turned its back on the indigenous crafts being influenced by the standards of the ruling race and took the consumption of imported goods in preference to native goods. Thus the government caused the dis-
 [redacted] of the courts was only [redacted] up under the new order of things.

(iii) *The policy of the East India Company and British Parliament*.—The commercial instincts of the East India Company led it at first to encourage Indian industries by financing them and otherwise, as its export trade was largely drawn from them. But this policy met with determined opposition from vested interests in England which made use of their influence in Parliament so that the Company should concentrate on the export from India of raw materials necessary for the English manufactures.* The opposition in England to the East India Company's trade between England and India was, at the end of the 17th century, also occasioned by the drain of specie to India which that trade involved. In the first half of the 18th century, England used the tariff against India with the double purpose of protecting her woollen and silk manufactures and of raising additional money to meet the cost of the Continental wars. From 1700 to 1824 the use of dyed Indian calicoes in England was prohibited by law which, however, left untouched plain muslins and calicoes and also all kinds of silk and cotton goods for re-export to the Continent. As Mr. R. C. Dutt observes, "India in the 18th century was a great manufacturing as well as a great agricultural country, and the Indian handlooms supplied the markets of Asia and Europe. It is unfortunately true that the East India Company and the British Parliament following the selfish commercial policy of a hundred years ago, by [redacted] to Indian manufactures in the early years of British rule and the encourage the rising manufactures of England. [redacted] with policy, pursued during the last decades of the 18th century [redacted] posi-

* Industrial Commission's Report, p. 75.

costs for the export of English manufacturers—all these added to the difficulties and hastened the ruin of the Indian artisan.* The construction of railways in India was too rapid to allow the artisans to adapt themselves to the new circumstances and find for themselves other profitable channels of employment. Being taken unawares and left to their own resources the artisans abandoned their traditional occupations in their thousands in favour of agriculture thus increasing the pressure on land. If the railway construction had been slower and the change had been more gradual greater powers of resistance might have been shown by the Indian industries, the resort to agriculture might not have been so wholesale in character, alternative avenues of employment would have been sought out and utilised in a greater measure and the hardships attendant on the transitional period would have been minimised. The revolution produced, however, was too sudden to permit any such adjustment.†

Q. The "Laissez Faire" policy of the Indian Government:—

Government not only did not lend a helping hand to the weaving handicrafts but even went out of their way sometimes to give direct assistance to English manufactures in exploiting the Indian market. The railways carried the products of English manufacturers everywhere in the country replacing home-made by foreign goods and encouraging the export of raw materials. The foreign trade of the country expanded at the expense of the domestic trade and an unhealthy concentration of the country's resources was the consequence.

* R. C. Ranade says, "The great Indian Dependency" [REDACTED]

† In exchange this (19th) century comes to supply the place of the old
fluence of pi. This Dependence is generally regarded as a planta-
is generally e [redacted] by the British agents in
great cotton e [redacted] raw produce [redacted]
the Spice Islands, to be worked [redacted] by British skill and
outside England to be re-exported to this Dependency by British

¶ See Hato the corresponding British firms in India and

\$ It has been the development of the steam-power and mechanical
ed even without the facilities of communication, have but
advantage of the facilities of communication, have but

Source: *Industrial Evolution in India*, p. 20.

Locality: *Indian Famines*, p. 107.

lent strength to this tendency of the times, and as one result of the change, the gradual ruralisation of this great Dependency, and the rapid decadence of Native Manufacturing Trade became distinctly marked." * The Indian consumer may have gained somewhat by cheaper foreign goods but the concentration of labour displaced from the indigenous handicrafts on agriculture, it has been suggested, increased the cost of famine relief and hence the burden on the consumer in his capacity as tax-payer. In any case, the disappearance of indigenous industries and the transformation of the country into a purely agricultural one was too heavy a price for whatever advantage may have accrued to the consumers. Assuming the Rayat had more money to spend, the increased spending power made him an even better customer for foreign goods which were thus helped in consolidating their position in the Indian market as against the indigineous goods.†

§ 22, Industrial Revolution in England and India: a contrast:- It is true that in England also the transition from the old to the new order of things established by the Industrial Revolution was attended with much dislocation and involved considerable suffering to the handicraftsmen. It is also true that government in England showed an equal indifference to the fate of the displaced weavers and other artisans, and state action so far as it was positive was intended to smooth the way for the new capitalist manufacturer not to minimise the suffering of the handicraftsmen. And, the displaced labour was quickly absorbed by manufactures after a brief period of sharp agony; instead of increased ruralisation there was a tremendous movement towards increased urbanisation and the demand on the part of the new industries for labour was so intense that the countryside was practically depopulated to meet it; and as a result of her Industrial Revolution, England entered on an era of unexampled prosperity and power. In all these respects the change in India was followed by altogether different results. *The Industrial Revolution in India was the result of forced adoption of the machine-made goods with which the artisans had to compete for a long*

* Ranade: *Essays on Indian Economics*, pp. 106-107.

† See Pillai, op. cit. pp. 27-28.

time those that were turned out not in Indian but in European factories. The disengaged industrial population had perforce to fall back on the land failing new large-scale industries in the country itself and the rural character of the country became accentuated. The artisan in his new role of a cultivator found himself economically in a decidedly worse plight than before, whereas in England his confrere often strengthened his financial position by profitable employment in the new factories. As to the effect of the economic transition on the country as a whole, inspite of the advance in agriculture, irrigation and transport, it is still a debatable question whether during the last hundred years or so the national dividend has increased to an appreciable extent. The increase, if any, is so slight and microscopic that many perfectly honest and intelligent observers are unable to detect it.

The growing ruralisation of the country referred to above is strikingly reflected in the Census statistics relating to the percentage of people dependent on agriculture. As early as 1880, the Famine Commission of that year found that the numbers who turned to the soil for subsistence were far in excess of those needed for its thorough cultivation, and this tendency has since been gathering additional momentum. As we have already seen* the percentage of the agricultural to the total population rose from 61% in 1891 to 66% in 1901, 71% in 1911 and 72·8% in 1921. This growing ruralisation is disquieting, not because it is ruralisation so much, as because it indicates that the opportunities of enriching the nation by industrialisation, for which the country is suited, are being neglected. Large-scale industry on modern lines although it is still far from having received the development of which it is capable, has, however, already made a start in this country. Government being now committed to a policy of rapid industrialisation the progress in this respect ought to be more rapid hereafter, remedying the excessive ruralisation which filled Ranade with misgiving and alarm. Greater development of the manufacturing industry in the country itself would obviously increase the difficulty of the artisans' position, and one of the questions which we will have to examine at a later stage would be, whether cottage industries are doomed to extinction or whether

* See p. 48, footnote f.

their continued existence and prosperity are compatible with industrialisation in the modern sense of the term.

§ 23. The Village in Transition:—The organisation of the village community and its economic life described already are undergoing a transformation as a result of the new forces called into existence by administrative centralisation, the growth of individualism due to the impact of Western civilisation and the revolution in transport and communications.

(i) *Administrative Centralisation*:—"The Indian villages formerly possessed a large degree of local autonomy since the native dynasties and their local representatives did not, as a rule, concern themselves with the individual cultivators, but regarded the village as a whole or some large landowner as responsible for the payment of Government revenues and the maintenance of local order. This local autonomy has now disappeared owing to the establishment of local civil and criminal courts, the present revenue and police organisation, and the operation of the individual Rayatwari system which is extending even in Northern India.† *This British policy of administrative centralisation* which was adopted in opposition to the recommendations of Elphinstone in Bombay and Munroe in Madras, who were anxious to preserve the village community in health and vigour, *paralysed the incentives to village autonomy*, and the brand new creations such as the District and Taluka Boards have proved very indifferent substitutes for the restricted but more effective self-government of the village.

Effective administrative centralisation postulates first, the establishment of a strong stable government, and secondly, easy communication and transport. Both these conditions may be declared to have been conspicuous by their absence in the pre-British period. Most of the ruling dynasties were pre-occupied with the more serious problem of self-preservation and of necessity followed the line of least resistance, interfering as little as possible with the village administration. And even the most powerful governments must, in any case, have found the task of a

† Report of the Decentralisation Commission, 1909.

day-to-day interference in the village affairs impossible of performance, owing to the purely physical difficulties of communication and the inaccessibility of the villages to the officers of the Central Government. Under these circumstances, the policy of decentralisation had perforce to be adopted and the autonomy of the village followed as the natural result of these conditions. With the present altered situation, the restoration of village-autonomy must come as the result of a deliberate surrender of power on the part of the Central Government. The rehabilitation of the village can, however, never mean a return in all respects to the old order of things. The village could never more be economically self-sufficient and almost completely isolated as of old; nor is it desirable that it should be thus self-sufficient and isolated once more.

(ii) *Growth of individualism* :—Another factor which has contributed to the disintegration of the village community has been the growth of individualism. In modern times, *individual legal rights have grown in all directions and have strengthened the position of the individual at the cost of corporate life*. Such a tendency has manifested itself in India, and is one of the strongest present-day forces making for the disruption of the old fabric of Indian society based on corporate rather than individual rights. It is, therefore, easy to understand that corporate feeling in the Indian village has been considerably weakened, although it is not altogether dead yet. The village has still sufficient vitality to be regarded as the primary unit of administration and the old village dignitaries such as the Headman and the Accountant are indispensable links between the village and the Central Government. Moreover, the prospect of the revival of the village self-government and corporate life has been considerably brightened by the influence of the Co-operative movement and the realisation on the part of the Government of the value and importance of the village Panchayats. The Montagu-Chelmsford Report gave the needed impulse to a movement which had already received the blessings of the Decentralisation Commission of 1909. It is not easy to pour new wine into old bottles without cracking them, and the task of reviving village self-government is one bristling with difficulties relating to finance, personnel and the unfortunate

break in the tradition of village self-government of over a hundred years. In spite of the great difficulties, however, the ideal of village autonomy is worth pursuing, and the obstacles in its path will vanish in the course of time with the economic betterment of rural India, the spread of education and general enlightenment of the people. It is essential, however, that the idea of village self-government must be pursued as part of a comprehensive scheme of rural reconstruction.

(iii) *Revolution in Transport* :—Lastly the revolution in transport effected by the construction of a network of railways and roads since the middle of the 19th century has broken down the isolation of the village and brought many changes in its train.

§ 24. Features of the village in transition :—(i) The most important feature is *the destruction of the self-sufficing character of the village*. The village now imports from outside cloth, kerosine oil, aluminium ware, sugar, tea, matches, umbrellas, scissors, bangles, mirrors, drugs, sewing machines etc. This increasing dependence of the village on the outside world has been largely helped by the changes in the standard of living due to Western influences. *The village has also begun to grow for the outside market* and the village folk have begun to depend in an increasing measure on exchanges with the outside world and thus an economic revolution of far-reaching character has been initiated.

(ii) *The nature of the famine calamity has also been transformed* along with break-up of the isolation of the village. The possibility of importing food from areas of plenty to make good the deficiency of local harvests has substituted famines of money for those of food as well as of money; and famine no longer stands for acute suffering from hunger on the part of large masses of the people, but merely involves scarcity prices and a temporary dislocation of employment and of agricultural operations. Similarly, the opposite fear of agricultural ruin by plenty and low prices in years of bumper harvests no longer exists on account of the extension of the size of the internal and international markets. At the same time, the old village grain-stores have practically disappeared.

because the village can now draw upon a much larger grain-store co-extensive with the whole country.

(iii) Another striking change in the old village relates to the *introduction of money economy*. The growing frequency of exchanges with the outside world, which stands in marked contrast with its rarity in the old days, and the rise in agricultural prices are bringing money into the village as also the remittances of such of the villager-folk as go out of the village for employment. This increasing supply of money has led to its adoption as a medium of exchange and payments in grain are now infrequent. Indeed, the substitution of money for barter, as we have seen, is a familiar feature of the transition from the old to the new economy. It marks a stage in the advance of civilisation. Land Revenue and other taxes, rents, interest on loans and wages are now paid in cash. Customary payments in grain for the services rendered by village artisans, have, indeed, not yet been completely supplanted, but they are much less important than in the old days. Cash payments are also needed for the things imported by the village.

(iv) *The village population is no longer stable and immobile* thanks to the railways and the economic necessity of supplementing rural income by earnings in towns. There is no longer the old fixity of occupations and there is a certain weakening of the influence of caste and status. The numbers actually employed in factories, mines and the great public works may, at any time, be negligible in proportion to the total population, but owing to constant substitution, the numbers affected by modern influences are far greater. The break-down of the isolation of the village is especially striking in the case of those villages which are within easy reach of big urban centres.

§ 25. Transition in village occupations :—(1) Transition in Agriculture :—We may now proceed to study briefly the transition in village occupations beginning with agriculture, the premier industry of the village, and secondly, the transition in the village crafts.

There has been *no fundamental change in the organisation of the agricultural industry*. Cultivation on a small-scale by small farmers working with their own capital and labour is still the

normal arrangement. If anything, the growing ruralisation of the country and the increased subdivision of land have considerably increased the number of small cultivators. Similarly, the old immemorial agricultural methods and technique still remain largely unaffected, the success of the Agricultural and Co-operative Departments in introducing improved methods and implements being very limited in character.

The transition in Indian agriculture has *four important aspects* which we may briefly indicate without entering into details which will be reserved for later treatment viz. (a) commercialisation of agriculture, (b) dispossession of the Rayats and the transfer of land from them to non-agricultural money-lenders, (c) increasing subdivision and fragmentation of holdings and (d) scarcity of rural labour.*

(a) *The commercialisation of agriculture*.—This has been brought about mainly by improved facilities of transport—especially the opening of the Suez Canal in 1869 and communications establishing wider and world-wide markets for agricultural products.

The opening of the world markets to the Indian farmer and the consequent commercialisation of Indian agriculture was forced into prominence in the sixties of the last century owing to the American Civil War. The American cotton supplies being cut off by that war, Lancashire had to exploit other resources like those of Egypt and India. The Lancashire demand led to a cotton boom which for a time put large profits into the pockets of the cotton grower and the exporter. Further, the opening of large tracts for cultivation due to the initiation of large irrigation works in the Punjab, U. P. and other provinces has given an impetus to the *substitution of commercial for subsistence husbandry*. Apart from transport and irrigation and connected with these, another factor responsible for the commercialisation of agriculture has been the increasing use of money in the village and cash payments of taxes, rent, interest and wages. The necessity of cash payments is compelling the cultivator to sell a part of his produce, in many cases a very large part, immediately after the

* For a fuller treatment of the question see Gadgil, op. cit., pp. 174-186.

harvest and he has often to buy back his own crop from the money-lender at prices higher than he himself had received.

* This new phase of agricultural production has in a certain measure led to *the specialisation of different regions in particular crops*, for example, Bengal specialises in jute; Bombay and Berar in cotton; C.P. in oil seeds; the Punjab in wheat, and so on. It has also led to an extension of the area under industrial and non-food crops like cotton, jute and oil seeds. There has also arisen a special class of middlemen, wholesale dealers and exporters for moving the crops such as cotton, jute, wheat etc. quickly to the ports and the inland distributing centres. In our chapter on Agriculture we shall see how far this commercialisation of agriculture has really benefited the producer and the country as a whole and what improvement in the marketing of agricultural produce is necessary.

(b) *The dispossession of the old peasants by the money-lender* is one of the alarming results of the curse of indebtedness which has been stimulated by the growth of individual rights in land, freedom of its transfer, rise in land values, facile and easy credit and the complicated civil law and procedure. We shall discuss elsewhere the primary and secondary causes of agrarian indebtedness along with the various measures taken by Government for checking the alienation of land in favour of the non-agricultural classes.

(c) *The increasing subdivision and fractionalisation of holdings* so highly detrimental to improved agriculture has been due to the growing pressure of the population on land operating through the Laws of Inheritance and Succession. This aspect of rural transition has come into sinister prominence in very recent times and is exercising the wits of legislators in the country at the present moment.

(d) *The scarcity of agricultural labour* of which complaints have become common in many villages is particularly felt at harvest time when the extra labour of the small cultivator and his family is not available; and it has been attributed to an increase in the area under cultivation, the growth of city industry and the tendency on the part of substantial farmers,

who have especially benefited from a rise in prices, to work their fields by hired labour.*

(II) Transition in the village crafts:—We may now turn to examine the change in the position of the rural artisan. *On the whole, the change here has not been revolutionary.* "The carpenter, the blacksmith, the washerman, the barber-surgeon, the potter etc. still exist as village servants with recognised duties and remuneration" receiving their customary dues. *But customary duties now play a less important part than they used to do in the past and the village artisan of today is more ready to migrate in search of better earnings elsewhere.* Easy and cheap transport by facilitating imports from abroad has made it all the less necessary for the village to provide for the satisfaction of all its needs locally. *The continuous presence of all the artisans in the village is, therefore, no longer required.* Payment of the artisan by the job rather than for the year is becoming more common though the transition in this as is in other respects is yet incomplete. The same factor is also responsible for the *partial concentration of certain artisans* like the weaver and the goldsmith in the larger towns and villages. The village artisan has been also adversely hit by the competition of the mass production of the factories, foreign and Indian, and some village industries have already collapsed as a result of this unequal competition.

The various village artisans have been, however, affected in different ways by the transition. *Hand-spinning* as in the case of the English Industrial Revolution has been *the worst sufferer* and the old spinning wheel in almost every cottage has now been for the most part silenced. *The village dyer* has also suffered on account of the import of aniline dyes and the use of dyed mill-made yarn. *The weaver* has suffered not only because of the competition of machine-made goods with which the Indian market was flooded but also to some extent because foreign Asiatic markets such as Java and Persia which had been previously supplied from India were now supplied from England. Hand-weaving, however, is by no means extinct in India. It is

* See Keatinge, *Progress of Agriculture in Western India*, pp. 144-146.

computed that there are still about six million handloom weavers in the country.* The increasing use of iron ploughs, crushers and other improved implements has prejudicially affected the position of *the blacksmith and the carpenter*. The growing use of enamelled ware, copper and brass utensils in the village has rendered *the potter largely superfluous*. The lot of *the village tanner* has become hard on account of the rise in world-prices of raw hides and skins, which are annually exported in large quantities from India and the increasing imports of ready-made tanned hides. *The village villman* has also been hit hard by the increasing use of kerosine oil in the village, export of oilseeds and the growth of an oil-pressing industry in towns. Where the village industry has suffered a set-back and depression, there has been a tendency for the displaced artisan to join the ranks of the day-labourers in the village itself or to migrate to towns in search of better employment. As a general rule, the artisans have given up their hereditary occupation only when forced to do so, though in some cases they have foreseen the ruin that was overtaking them and abandoned their occupation without waiting for their position to become absolutely desperate.

As regards those artisans who still continue to ply their ancestral vocations, there has been little change in their condition. *Some of them have adapted their trade in some measure to the changed conditions of production*; for example, the weaver now mostly uses mill-made yarn and the fly-shuttle in some cases as in Madras; the smith imports ready-made iron and tin sheets, the carpenter makes use of improved implements and the tailor uses the sewing machine.

It is thus obvious that *not all the artisans in the village have been equally affected*. Those that have been able to concentrate in the larger villages or to migrate to towns have improved their position, for example, the carpenter and the blacksmith, for whom there is a growing demand in the engineering, workshop, building and furniture industries in the towns. Those, however, that

* See Knowles : *Economic Development of the Overseas Empire*, p. 189 I, E. 23.

could not leave the village and had no other alternative suffered and have had to take to ordinary agricultural labour.

The foregoing survey of the transition in the village handicrafts* shows that rural industry is on the whole decaying. Large numbers of artisans have degenerated into mere wage-earners. A fortunate few have improved their position by migrating to towns. Some have become farmers, while those that have had to stick to their hereditary position are generally in a desperate plight and they are the first to flock to the public relief works in times of famine and distress.

The problem of the revival of cottage industries in the village both as spare-time occupations for the agriculturist and his family and full-time occupations for the village artisans is discussed later on.

§ 26. Transition from status and custom to contract and competition:—We, already discussed, in the Chapter on the Social and Religious Institutions the extent to which status as regulated by the caste and the joint family system still operates in India, and it has been shown there that Indian society is in a condition of flux and transition, and is gradually assuming a new character. *Custom, for example, as a regulator of wages, rent and prices is being steadily supplanted by competition, more particularly in urban areas.* The spread of Western civilisation, the introduction and the extension of money economy and the development of communications are rapidly weakening the force of custom, and competition is becoming the predominant force everywhere. Even in the most advanced communities, however, the force of custom is to some extent mitigated by that of custom. But though not entirely absent, the influence of custom is negligible in Western Europe. In India, it is more powerful, though it is important to note that *the drift of events is unmistakably towards the supersession of custom by competition and in general towards a rapid approximation to Western conditions.*

(a) *Competition and rent*:—The growth of population, the

*For a more detailed account of the transition in the village handicrafts see Dr. Gadgil's *Industrial Evolution of India*, pp. 187-203.

ruralisation of the country, the practical absence of other outlets, the high prices of commercial crops like jute, cotton, wheat, oilseeds etc., the traditional sentiment in favour of land and the establishment of peace and order together with the introduction of cash rents have all extended the range of competition in determining rent. In some cases, the tendency towards rack-renting the tenants on the part of landlords has had to be checked by the passing of Tenancy Acts as in Bengal, Madras, U. P., C. P. etc. so as to secure to the tenants the enjoyment of rights conferred upon them already by custom and to prevent arbitrary increase in rent and eviction. Thus the Tenancy Legislation in India aims at protecting the weaker party from exploitation by the stronger and is intended, to some extent, to act as a substitute for custom, which in the old days had a similar effect. As regards house rent in towns, it is now practically a competitive rent; the only thing that need be said about it is that in a few places like Bombay it is controlled by legislation.

(b) *Competition and wages*:—At the present time in India, especially in the towns, wages may be regarded as governed more by competition than by custom, although competition even in this sphere is not so powerful a force as in the Western countries. The response of wages to changes in demand and supply is not so quick as in the West and so the wage level, while it is different in different parts of the country, is comparatively stable. Competition now affects the rate of wages in villages also as a result of various forces, such as the increased demand for labour in towns, the greater mobility of labour due to better means of transport and the introduction of cash wages. The customary remuneration of the village artisan, as has already been shown, is becoming less important, especially in the case of such artisans as the village blacksmith and the carpenter who can find alternative employment in the towns. The wages of farm labour are also largely governed by competition, particularly where there is a scarcity of agricultural labour. The nearest approach to purely competitive wages is attained in the towns under the influence of an ever-increasing demand for labour.

(c) *Competition and prices*:—Prices in rural areas are being

increasingly determined by competition as regulated by the relations between demand and supply. In consequence of improved communications, changes in prices in one part of the country now-a-days quickly affect those in other parts, and the linking up of the country with the world's markets has considerably enlarged the scope of competition in determining prices. It is obvious, however, that prices in rural areas are bound to be more sluggish than in urban areas owing to the greater conservatism and ignorance of the rural population.

§ 27. **Transition in Industries:**—We have already described the transition in the indigenous industries of the country, the causes of their decline and the progressive ruralisation of the country.

The industrial position of India, as Justice Ranade* points out, had sunk lowest towards the middle of the seventies of the last century, but from that time onwards there has been very gradual but almost uninterrupted progress.¹ As Morison observes, "To those who look forward with hope to an industrial revolution in India, the bright side of the picture is not to be sought in the village at all but in those manufacturing centres which have sprung into life in recent years and in which industry is organised on a completely modern basis. It is to Bombay, Cawnpore and the banks of the Hugli that we must go to find labour concentrated together and working under expert supervision. It is in such cities that capital has been freely spent on the erection of mills and costly machinery, that the economies of large-scale production have been secured and that Indian captains of industry have arisen."[†] *The new form of industry was first established in the plantation industries* such as those represented by the tea, coffee, indigo and jute estates, which were and have remained to this day in the hands of European planters. This new development was favoured by the removal of restrictions on European settlement and enterprise in India by

* "Things were as bad as they could be about 1870-7; since then the tide has turned, and India has shown signs of revival which marks its first step in the transition from a purely agricultural country into a partly manufacturing and trading country." *Essays*, p 119.

† Morison, *op. cit.*, pp. 170-171.

the Charter Act of 1833 and also by the abolition of slavery in the West Indies which deprived the West Indies planter of the advantage of cheap labour. British business men were not slow to perceive the scope which the rich and varied supply of raw materials and the huge extent of the local market offered to manufactures on modern lines and thus justified the prescience of Lord Dalhousie who foresaw the development. The flow of British capital and enterprise into India became especially pronounced after the middle of the last century. The part it has been allowed to play in the economic evolution of India has given rise to one of the country's knottiest problems in economic policy, especially in view of the recent protectionist development of national policy, which will make the danger of exploitation by foreign capital greater than before.

The example of European business men evoked a corresponding enthusiasm among the commercial classes of India, more especially in Bombay, which had the honour of giving a lead in this matter to other parts of India and winning for herself the position of the industrial capital of India. Though the progress of large-scale industries has been slow, its definite establishment in the country may be regarded as a partial set-off to the movement towards ruralisation which Ranade deplored so much.

About the middle of the last century, the factory industry was introduced into India and the first outposts of the Industrial Revolution were planted in the country. Then were established two of the most important of India's present-day industries in Bombay and Bengal respectively. *The Cotton Mill industry has from the first been financed and managed by Indian capital and enterprise, while the Jute industry has been dominated by European capital and enterprises.* The Industrial Revolution then spread to the *Mining industries*, and then to various other industries such as cotton gins and presses, coal, manganese, gold and mica, steel and iron, rice-husking and grinding mills, oil-mills etc. Progress was at first very slow and confined only to a few places in the country and it was only towards the end of the last century that factory industry began to develop all over the country.

§ See Knowles : *op. cit.*, p. 306

In the first decade of the present century, especially under the influence of the enthusiasm created by the *Swadeshi movement*, many mineral and some miscellaneous industries came into prominence. It was also during these later years, that there was a spread in India of the use of small machines and small engines and generally a tendency to make a *greatly increased use of mechanical appliances everywhere*.* The war gave a temporary stimulus to Indian manufactures, particularly to the Cotton and Jute mill, Steel and Iron and Leather industries. The recent extension of large-scale industry referable to the *policy of "Discriminate Protection"* will receive detailed notice in our discussion of the Tariff policy of India.

✓ *Two rather depressing features of this transition in Indian industries must be noticed. One is that the movement has been very slow and uneven; and the second is that much of it has been directed by foreign capital and foreign enterprise* which consequently occupy a dominant position in Indian industry and absorb a large portion of the newly created wealth. The invasion by foreign capital and enterprise, while it has stimulated industrial development, has resulted in many cases in the premature exploitation of such of the country's resources as are not subject to the process of natural growth and recovery, and created powerful vested interests often in sharp antagonism with the national point of view in political and economic matters. Among the causes which explain the slowness and the uneven character of our industrial development, the most prominent are *the inadequacy and shyness of Indian capital* noticed by Ranade, *inadequate banking facilities, uneven distribution of natural resources such as coal, and their comparatively undeveloped condition, the relative inefficiency of our labour, skilled and unskilled and the dearth of skilled labour and captains of industry* together with the *undeveloped condition of such basic industries as Steel and Iron*. Another cause of the slowness of the movement was *the apathy of Government* and their failure to put forth special effort to speed it up. The recent initiation of protection marks a welcome departure from the

*For further historical details vide Dr. Gadgil's *Industrial Evolution of India*, Chap. iv, vi and viii

attitude of indifference to industrial progress which has long characterised British policy in India.

§ 28. Two tests of industrial progress:—We may now proceed to ascertain the extent of the industrial progress made by India and of the economic transition effected. Two tests have been suggested, (i) The statistics of foreign trade, and (ii) the growth of towns

(i) *Statistics of Foreign Trade* bearing particularly on the proportion of manufactured goods in the imports and exports may first be discussed. As Morison observes, "Both exports and imports have increased largely with the growth of the country's wealth and population, but the export of manufactured articles has increased more largely than the export of raw materials, thus showing the local development of industries. "In the import trade, the tendency is, as we should desire it to be, in the opposite direction; the import of raw materials has increased to a greater degree than that of manufactured goods," thus showing that the country has been importing raw materials in large quantities to be manufactured in this country. Between 1879 and 1892, as Ranade has himself pointed out, the export of manufactured or partly manufactured goods rose to Rs. 16.42 crores showing an increase of 211 %. The rise in the export of raw produce from 59.6 crores to Rs. 85.6 crores was not relatively so high, being only 43 %. On the other hand, manufactured imports rose from Rs. 25.9 to 36.2 crores or by 39 %, while the imports of raw produce almost doubled themselves from Rs. 13.75 to 26.38 crores or 91 %. And on the strength of these figures, Ranade came to the conclusion that the reverse movement to "the collapse of domestic industries and the gradual rustification of our occupations" had made a promising beginning.* "Continuing the analysis on the same lines from 1892 to 1907 Prof. Kale has been able to show that the import of manufactured goods rose during this period by 93 % and of raw materials by 127 %; while the export of manufactured goods rose by 139 % and of raw materials by only 57 %. The proportion of the imports of manufactured goods to total imports

*Ranade : op. cit. p. 111.

which stood at 65 % in 1879 and 57 % in 1892, dropped to 53 % in 1907, and, in the same way, the proportion of manufactured exports which was only 8 % in 1879 and 16 % 1892 rose to 22 in 1907 " and it may be pointed out here that under the stimulus given by the war, this proportion has risen to 36 % in 1919.*

The accuracy of these statistics has, however, been impugned by some critics like J. M. Keynes who contend that "the figures for the imports of manufactures in the official statistics are misleading and do not mean what they apparently imply"; because this heading excludes among other items, all imports of machinery and of metals and and metal manufactures. Similarly, the calculations regarding the growth of imports of raw materials are misleading. On the export side, half-finished manufactured articles such as cotton yarn and tanned hides swell the total figure for exports of manufactures and give an exaggerated impression of the growth of industries and the pace at which it is proceeding. We shall revert to this topic in our survey of the main features of India's foreign trade. Here it is sufficient to say that *the trade returns leave us in no doubt that the tendency towards the industrial development of India is itself unquestionable and is growing with the passage of time.* Indeed, there are some who, like Dr. Gilbert Slater, are alarmed at the present rate of progress which, they believe, threatens to be too fast for social and economic stability and tends to outpace the adoption of measures to prevent the evils of modern industrialism. This view, however, is not generally held, the predominant feeling being in favour of more rapid industrialisation; for even today the bulk of our imports consist of manufactured articles and a very large proportion of our exports is made up of raw materials and food-stuffs thus indicating the necessity of hastening industrialisation. This view is further borne out by a comparison of the Census figures of 1921 with the earlier figures which shows that agriculture still remains the premier industry of India and that the growth of the manufacturing population has been very slow.

(ii) *The growth of towns*:—We shall now proceed to discuss

* See Pillai: *Economic conditions in India*, p. 31.

the second test which has been suggested viz. the growth of towns.* *The small number of towns and the insignificant proportion of the urban to the total population* may be taken as an index of the industrial backwardness of the country. A statement has already been given showing the steadiness of the ratio of the urban population in India.† Over a long period the proportion of the urban to the total population has remained more or less unaltered and *the urban population has grown only slightly more quickly than the total population of the country*. In England, on the other hand, the development of new industries brought about a rapid urbanisation of the population, of which 78% lives in towns. From the point of view of the urbanisation test, it is clear, therefore, that India has got a tremendous lee-way to make up.

We shall now consider the different forces acting on the growth of towns in modern India.

§ 29. Modern forces influencing the growth of towns in India:—

(1) *Railways and navigation have brought into existence new commercial centres* and have increased the importance of some of the old ones. In fact, one of the earliest results of British rule in India was the growth of the great mercantile centres, and we may say that the British have played the role of town-builders in India. Bombay, Karachi, Madras, Rangoon, Calcutta, Delhi, Lahore, Hubli, Bangalore serve as illustrations of the new commercial towns.

(2) *The growth of new industries* in the West has meant the crowding of vast masses of population into mammoth towns and cities—a phenomenon not without its counterpart in India. The leading industries of the country have contributed to the conversion of the villages into towns and towns into cities. Bombay, Ahmedabad, Sholapur and Hubli with their cotton mills, Cawnpore with its woollen mills and leather factories are all creations of the new industrial era and owe their size and a substantial part of their importance to their respective staple industries. The rapid development of Jamshedpur since 1911, as a result of the

* For a detailed treatment of this subject see Gadgil, op. cit., Ch. x.

† See p. 50.

expansion of the Tata Steel and Iron enterprise, is one of the romances of industrial achievement in India. The influence of industrial development on the growth of towns has not, however, been so powerful in India as in the Western countries. This is shown by the fact that out of the existing thirty-four Indian cities, containing more than a lakh of people, not less than twenty-two owe their importance, partly at any rate, to other than manufacturing or commercial activities, and also by the fact brought out by the Census of 1911, that only 30 % of the inhabitants of these cities were occupied in industrial pursuits.

(3) *Famines* are among the causes which deplete the countryside and increase the volume of the urban population. It may happen that part of this addition is permanently absorbed by the occupations in towns though most of it is certainly lost owing to people returning to their villages after the advent of the rains.

(4) *The creation of a class of landless labourers in the villages* is the result of famines and the dispossession of the old peasant proprietors, and the transformation of the artisans into wage-earners. The existence of this class promotes urbanisation to some extent, for the landless labourer is often ready to migrate to the towns if he can find employment there. And this tendency would have been much stronger had it not been for the deterrent effect of insanitary conditions and wretched housing in industrial towns, which keeps away from them much of their potential supply of labour.

(5) *The attractions of urban life* have led wealthy landlords and other persons of substance to settle in towns. This incidentally encourages absentee landlordism and creates a lamentable blank in the villages.

(6) *Administrative centralisation* has increased the urban importance of the Taluka place in comparison with the village, of the District head-quarters in comparison with the Taluka place and similarly, in the case of Divisional Head-quarters, and Provincial, Imperial and State capitals.

(7) *Facilities for secondary and higher education* are practically confined to the bigger towns and parents often choose them as residences with a view to the education of their children.

§ 30. Influences making for the decline of towns:--Side by side with this increasing urbanisation, must be noticed the tendency of the older towns to be depopulated. *Changes in regional values and diversion of trade routes* have in many cases brought about the decline of towns which previously owed their prosperity to the command of river and road traffic, now superseded by the railways, for example, Mirzapur on the Ganges, Patna, Saugar etc. The railway engineer cannot always contrive that the railway line should pass by the old urban centres, so that being left severely alone away from the main line, some of them have naturally dwindled in importance.

The decay of urban handicrafts, following in the wake of the disappearance of the old courts and the rise of the European competition, has brought about a decrease in the population in the old Indian towns, such as Dacca, Murshidabad, Mandalay, Tanjore etc. Even the sacred towns like Gaya and Benares are losing their importance and population, as a result of the fall in the demand, on the part of the pilgrims, for the products of the old industries of these towns.

(3) *Diseases like Plague, Cholera*, periodically turn urban areas into charnel houses and drive the population away to the open country. This movement is, however, only temporary in character and is reversed with the restoration of normal conditions of health in the towns.

Taking into account the two opposite tendencies of the growth and decline of towns we reach the conclusion that they have so far just balanced each other, though in recent year the tendency to urbanisation is slightly gaining the upper hand. This stands in marked contrast with what happened in England during the period of the Industrial Revolution. There the towns in the South decayed in a short time but their loss was nothing in comparison with the rapid rise of vastly more populous urban centres in the North.

§ 31. "Sudden Transition from Local to International Economy" ?*--:Professors Wadia and Joshi, (apparently following the language of the Bombay syllabus in Indian Economics), characterise the evolution which we have described under the heading

* *The Wealth of India*, pp. 158-60.

of Economic Transition, as a " sudden transition from Local to International Economy." This is dramatic and it is impressive. But before giving currency to a new slogan we must satisfy ourselves that it is helpful, or at least not positively misleading. " Normal economic evolution ", we are told, " commences with local economy, the stage of economic life that lasted through the Middle Ages in Europe and reached down to the days of Adam Smith." This is followed by the stage of National Economy " in which every nation formulates and carries through a definite economic policy directed to the promotion of its national welfare, evolving a many-sided economic life and subordinating all other considerations to the national interests and the desire of self-sufficiency. " In the international or world economy " all nations form a single organic unit with territorial division of labour, in which the gain of any one member is the gain of all the rest. " After coming thus far, we are usefully reminded that international economy in this sense has not yet been evolved; in fact, it cannot be evolved at all, according to Grunzel, who is quoted by the authors without comment and, therefore, we may presume, quoted approvingly. " There cannot be a world economy or international economy, " says Grunzel, " because a world-will which would rank above national wills and in which they would find expression does not exist. International relations are not regulated in accordance with an ideal of the human race, but according to the wills of the nations concerned. " This is not the sense in which the transition to international economy has taken place either in India or elsewhere. That being so, what is really meant by saying that India has undergone a sudden transition from local to international economy ? An attempt is made to help us to an answer to this question by asking us to reflect, that " what an international world economy to-day means is the growing intensive rivalry of a few leading powers exploiting the resources of the undeveloped tracts of the African and Asiatic continents, entering into an exchange of commodities that is one-sided in its action. " This may be a true description of what is happening at the present moment, but if this is not the obvious and natural meaning of international economy, there does not seem to be any justification for wrenching the phrase from

its proper use (as explained by Grunzel¶) and applying it to describe a state of affairs for which it was not intended. Again, according to this interpretation of world economy, we have to suppose two sets of nations, one set composed of the exploiting and the other of the exploited countries, and both these classes of nations are apparently to be described as having entered the stage of world economy (in this sense). A phrase which applies equally well both to the diner and the dinner must necessarily carry some neutral meaning. So we reach the position that a nation is to be regarded as having entered the stage of international economy when it establishes trade relations—whether to its benefit or not—with other nations. This, we are told, happened too suddenly in the case of India and that it would have been much better if this phase had been preceded by the phase of national economy. " But national economy does not imply that no commercial relations with the outside world are tolerated under it. At the most, it implies that these relations are rigidly regulated and controlled. So that in order to rationalise the proposition that in India there was a sudden transition from local to international economy, we must make still another transition in the meaning of the phrase. International economy must now

¶ This is also the sense in which Seligman uses the term as will be evident from the following passage :—" More recently still, the further application of capitalist methods, the improvements in transportation and communication, coupled with the growth of modern speculation, tend to produce a world market for most products, and the perturbations of trade are quickly transmitted from country to country. We might thus even be tempted to speak of an international rather than a national economy. But although the signs are not wanting that the ultimate outcome will be the creation of such a world economy, it must not be overlooked that the economic unit today is still the nation, and that the national standpoint is being only slowly transformed by universal or international considerations." (*Principles of Economics*, third edition, pp. 81-82). Thus we cannot talk of international economy until " the national standpoint is transformed by universal or international considerations." In a truly international economy the sacrifice of any particular nation would be acquiesced in by the nation concerned and not imposed upon it by guile or force employed by some other nation. Also the ultimate justification of such a sacrifice would invariably be the consideration that it would be to the eventual benefit not only of the world state in general but also of the individual state itself called upon to make the sacrifice.

be made to mean not merely international exchange but international exchange which is entirely uncontrolled and unregulated.

We think that a phrase which requires so many twists and turns to explain and justify it had better be abandoned altogether. While we object to the phrase, however, we are in general agreement with the view that the economic transition in India has been accompanied by many regrettable features. Some people have nothing but unqualified condemnation for the changes that have come about as a result of this transition. We, on the other hand, think that the change, like the curate's egg, is good in parts; but it has brought along with it some unquestionable evils, such as the excessively one-sided nature of India's foreign trade, the rapid decline of her indigenous industries, the undue preponderance of foreign capital in her economic life, the excessive pressure on the land and so on. And the development of a true national economy is, of all things, the most vitally important at the present juncture for the economic uplift of the country, (it being understood that a national economy is not necessarily committed to the goal of self-sufficiency or to any particular policy whether of protection or of free trade, but chooses its course, whatever it may be, with the sole object of promoting national welfare).

§ 32. Is industrialisation desirable for India? :—The movement towards industrialisation has already made a fair start in India. And while the general trend of opinion is in favour of accelerating it, there are some who would, if they had their own way, nip it in the bud, as being fraught with sinister possibilities for the country. Part of the opposition to industrialisation comes from those who look with horror on all machinery, because they believe that it inevitably degrades human life and work, and makes both mechanical and joyless. They yearn for a simple and primitive system of industry, under which there would be more air and sunshine, more elbow-room and greater freedom, than can ever be possible under a regime of machinery. There is however, generally a poetic vagueness and lack of actuality and substance about these visions of an ideally simple economic life

and we know as a matter of fact that they have never been actually realised anywhere at any time. We know, on the contrary, that manual labour can be very dull and heavy and brutalising, and that man has improved his economic position and turned the earth into a more and more comfortable and desirable place of habitation for himself in the measure in which he has increased his mastery over nature and this is essentially what the replacement of human and animal labour by machinery means.

Some people while admitting the necessity of supplementing the labour of man and animals up to a certain limit, would draw a line beyond which they would not allow the domination of man over nature to go. They would stop, for example, at the wind-mill or the water-mill or a simple wooden plough or a charkha or spinning wheel, but they have no satisfactory answer to the question, why these beginnings of human mastery over nature should not be followed up by a more complete domination.

The introduction of machinery and large-scale production of the modern type is no doubt apt to bring very much in its train, such as over-crowding and the rule of the weak by the strong; and to compel large numbers of people to live in cramped, squalid and distressful live-able and unhealthy surroundings. It is true that the only way of avoiding these evils of modern methods of large-scale production, as it shows, it is possible very greatly to modify them by suitable state action and legislation. But that, although in the West there is profound criticism of the present economic organisation, nobody has proposed the abolition of machinery altogether is directed more against the alleged inequality in which the wealth that is produced, is distributed than against the employment of machinery and the system of large-scale production.

The fact is that although we must take into account the material side of life, it is necessary for a poor country like India, that the wealth per capita be increased and her teeming millions must be freed from the worries of mere existence, in order that an

should be possible for them. And this cannot be done without the help of up-to-date methods of production. Moreover, it must be remembered that India can no longer remain isolated even if she wishes to, and she can only survive the onslaughts of foreign competition by forging the weapons of modern industrialism. The case for machinery has been recently well put by F. S. Marvin as follows:—"A machine is something which extends man's physical powers in dealing with nature, enables him to put more brains into longer and defter fingers and indefinitely strengthened muscles. Any one who opposes this in principle, opposes the upward march of our species, nor can he draw even an intelligible line and say, so far it was right for man to strengthen himself but no further. Is it to be at the motor-plough or at the first simplest stick for scratching the ground, at the steel mechanical reaper or the stone-man's flint axe? There is no difference except of perfection and power. The real objections are to something quite different, the industrial town, the factory system, the machine which is called 'wage-slavery.' But these are social evils, and in no necessary way bound up with the power over nature."

Industrialism in India have sometimes taken a wrong turn. It has been pointed out that if industries are to be fostered, they will have to be at the expense of agriculture, the backbone of India. This argument will be examined in the next chapter. In the meanwhile we must keep in mind the statement that industrial development is antagonistic to agricultural development in India, and that it has the most beneficial influence on it.

It has been pointed out that the conviction about the possibility of rapid industrialisation is growing among those who set themselves in opposition to the traditionalists. They find that they are engaged in a hopelessly losing battle. They have no more chance of success in their advance of the oncoming tide of industrialism. Mrs. Partington had in her unequal contest with the traditionalists which she valiantly tried to push away with

CHAPTER VI.

AGRICULTURE.

§ 1. The place of agriculture in Indian Economics:—The most striking characteristic of the economic life in India is the overwhelming preponderance of agriculture over other occupations, the great mass of human life and effort, represented by three out of every four persons in the country, being devoted to agriculture. Agricultural production provides practically all the food-grains consumed in the country, and yields large quantities of raw materials like cotton jute, oilseeds etc. for the principal manufacturing industries. And yet a study of the present position of Indian agriculture must lead everyone to endorse the gloomy words of Dr. Clouston, Agricultural Adviser to the Government of India, when he says, "In India we have our depressed classes; we have, too, our depressed industries and agriculture, unfortunately, is one of them."* Judged by whatever standard—the size and the constitution of the holding, the implements and the fertilisers in use, the system of rotation of crops, the quality of the seeds, the position with regard to irrigation facilities and other land improvements, marketing organisation, animal husbandry, subsidiary rural occupations etc.—our agriculture is in a hopelessly backward and stagnant condition, the result being under-production and excessively low outturn per acre, which at best is often only one-third or one-fourth of what is obtained in other lands and which dwindles to nothing during times of drought and famine. §

§ 2. The need for agricultural development:—The need for agricultural improvement is imperative from many points view. It will lead to an improvement in the economic condition of the masses and raise their standard of living. It will ensure an adequate food-supply for the population of the country. The reactions of improved agriculture on industry are no less important.

* Royal Commission on Agriculture, Evidence, Vol. I

§ Ibid, p. 14.

...I. E. 25

The increased purchasing power of the rural masses will provide a large home market for absorbing the products of the home manufactures. Improvement in agriculture will necessarily imply a growing mechanization of its processes and may be expected to bring into existence large manufacturing establishments to produce agricultural tools and machinery.* Government are showing signs of a proper realization of the importance of agriculture and the appointment of the Linlithgow Commission may be regarded as a practical earnest of the desire of Government to put forth special efforts for speeding up agricultural progress in India.

We may, however, make two things clear here. In the first place, as already pointed out, the plea for improved agriculture does not mean, that nature has destined India to be an exclusively agricultural country. In our opinion she is so situated that she can have a prosperous manufacturing industry as well as a thriving agriculture. In the second place, we must appreciate the fact that our agricultural problems cannot be solved in an isolated fashion without reference to our industrial problems, and we would do well to remember how, during the period of the Industrial Revolution in England, agriculture and industry were transformed side by side, progress in one helping progress in the other. The present congestion in Indian agriculture and the ruralisation of the country are evils which cannot be overcome simply by a system of improved agriculture. A simultaneous industrial development is also necessary to relieve the pressure on land and to ensure a steady flow of capital from the cities and manufactures for investment in land.

The present Indian awakening may be regarded as a phase of the world-wide interest in agriculture which has been in evidence since the War. If there was noticeable, in the pre-War days, a certain tendency to forget the supreme importance of agriculture, the experience of the War by exposing the dangers of dependence on foreign supplies in the matter of food and raw materials has put an end to this indifference. Agriculture has again come into its own as a premier national key industry and much is being talked and written about its rehabilitation and advance in practi-

* See Industrial Commission's Report, p. 22.

cally every country not excluding England itself, the classic land manufacturing industry.

§ 3 Statistics of area under different crops in British India:—*

	1901-2. Acres (Millions)	Percentage of net area by professional survey.	1925-26 Acres (Millions)	Percentage of net area by professional survey.
Net area by profes- sional survey	550·31	...	667·61	...
Area under forest	66·36	12·0	86·93	13·2
Not available for cultivation	135·35	24·6	150·19	22·5
Culturable waste other than fallow	107·52	19·5	151·87	22·7
Fallow land	42·14	7·5	49·30	7·5
Net area sown with crops	199·71	36·1	225·84	33·8
† Total sown area (includes area sown more than once)	220·35	...	256·99	...
Area irrigated	32·61	...	47·56	...

Area under food-grains	Percentage of total sown area	Percentage of total sown area
Rice	70·06	80·17 ✓
Wheat	18·60	23·97
Barley	6·21	6·61
Jowar	21·81	20·61
Bajra	13·19	12·26
Ragi	3·75	3·88
Maize	6·19	5·50
Gram	9·78	14·32
Other grains & pulses	27·35	28·71
Total food-grains	176·99	80·0
		196·06
		76·3

* Statistical Abstract, 195-6, p. 329.

† Total sown area=227·34, millions, if area of crops that failed is included.

Area under food-grains.	1901-2	Percentage of total sown area	1925-26	Percentage of total sown area
Area under other food crops (including vegetables, fruit, spices etc.)	6'18		7'75	
Area under Sugar	2'59		2'80	
Coffee	'12		'09	
Tea	'49		'72	
Miscellaneous food-crops	1'84		1'21	
Total food crops	188'24	85'4	208'66	81'2
Area under oil-seeds				
Linseed	2'26		2'52	
Sesamum (Til)	3'75		3'40	
Rape & mustard	2'87		13'08	
Other oil-seeds	3'07		'14	
Groundnut	...		3'76	
Cocoanut	...		'64	
Castor	...		'57	
• Total oil-seeds	11'96	5'4	15'15	5'9
Area under Cotton	10'30		18'18	
Jute	2'27		2'92	
Other fibres	'56		'91	
Total fibres	13'14	5'9	22'01	8'5
Indigo	'79		'13	
Opium	'60		'08	
Tobacco	'95		1'06	
Fodder crops	2'94		8'93	
Miscellaneous non-food crops	1'71		'98	
Total non-food crops	32'11	14'6	48'32	18'8
Total sown area	220'35		256'99	
(includes area sown more than once)	20'64		31'14	

§ 4. Estimated yield and area of principal crops (includes also "crops in certain Indian states) :—

	1901-2. Yield (Millions)	1925-26. Yield (Millions)	1925-26. Area (Millions of acres)
Rice (tons)	19'21	30'63	82'37
Wheat „	6'09	8'70	30'47
Jawar	...	5'31	29'58
Bajra	...	1'98	12'25
Gram	...	3'87	14'30
Raw sugar (tons)	2'02	2'97	2'67
Tea (lbs.)	191'30	363'50	'72
Cotton (bales 400 lbs.)	3'56	6'25	28'49
Jute	7'43	8'94	3'11
Linseed (tons)	'35	'40	3'57
Rape and mustard (tons)	'95	'91	5'60
Sesamum (tons)	'35	'42	4'97
Castor seed „	...	'14	1'40
Groundnut (tons)	'06	1'99	3'97
Indigo (cwts.)	'11	'02	'13
Coffee (lbs.)	15'57	22'10	'14
Rubber „	...	19'97	'13

(Estimates of area and yield of principal crops in India, 1925-26 p 8)

§ 5. Scope for intensive and extensive cultivation :—From these figures it would appear that 35'75 of the total area is not available for cultivation, that only 33'8 % of the total area is actually sown, and that putting together the current fallow and the culturable waste, about 30'2 % of the total area is available for extending cultivation in India. The same fact may be put in another way. Of the total area available, only 53 % (on the basis of the net sown area), or 59'1 % (on the basis of the total sown area) is actually cultivated. The area available in the different provinces for extending cultivation may be seen from the following table for 1925-26 :—

Province	Area according to survey.	Cultivated		Uncultivated		
		Net area sown.	Current fallows.	Culturable waste other than fallows.	Not available for cultivation	Forests
Madras	91'70	33'83	10'14	12'34	21'11	13.15
Bombay	78'79	31'28	11'60	6'95	19'70	9'24
Bengal	49'12	23'84	4'65	5'82	10'21	4'58
U. P.	68'30	34'80	3'38	10'49	10'06	9'26
Punjab	62'25	26'01	4'15	15'35	12'54	2'17
Burma	155'65	17'27	3'76	60'12	54'53	19'96
Bihar&Orissa	53'08	25'14	5'55	7'06	7'76	7'55
C. P. & Berar	63'95	24'87	3'26	14'72	4'81	16'41
Assam	33'16	5'82	1'88	15'86	5'51	3'74
N. W. F. P.	8'38	2'30	'47	2'72	2'65	'35
Ajmer-Merwara	1'80	'29	'21	'31	'86	'11
Coorg	1'01	'13	'17	'01	'33	'35
Delhi	'36	'21	'02	'06	'07	...
Total	667'61	225'84	49'30	151'87	150'19	86'93

It is, therefore, especially in Burma, Assam, Sind (Bombay), Punjab and the Central Provinces that there would appear to be scope for further cultivation. But on a close examination of the question, the conclusion is forced on us that the prospects of extensive cultivation are on the whole very limited in India. In the older provinces like Bengal, U. P., Madras, Bombay (proper), cultivation has naturally followed the line of least resistance and the better kind of lands have already been brought under the

plough and for the greater part inferior soils alone remain to be broken up for cultivation. In the majority of cases, however, this can only be done provided adequate irrigational facilities are forthcoming. A similar situation is gradually developing in the newer provinces like the Punjab, C. P., Assam, Burma and Sind, where though the superior lands have not yet been fully occupied, several difficulties have to be faced. The problem of extending cultivation in the Punjab and Sind is one primarily of irrigation, which no doubt is easier here than, for instance, in the Bombay Deccan and C. P., but which must all the same reckon with very definite financial and physical limitations. In Assam, apart from its unhealthy climate, the principal obstacles are uncongenial conditions of labour and the consequent difficulty of recruiting the required labour-supply. In Burma, the growth of a strong provincial feeling with its watchword of "Burma for the Burmese" militates against rapid extension of cultivation which, under the present circumstances, is only possible with the help of labour drawn from outside. Thus no very striking extension of cultivation can be expected even in those provinces where there is a large area of culturable waste. This conclusion is borne out by the following figures which show that in more recent years progress made by the net area sown with crops in British India has been very slow and gradual:—

Year	Net area sown (in millions of acres)
1892-93	195'91
1901-02	199'71
1910-11	223'06
1921-22	223'18
1925-26	225'84

It is thus clear that a more hopeful solution of the Indian agricultural problem lies in the direction of intensive cultivation. As an illustration of the possibilities of intensive cultivation we might cite the instance of Japan, where a population of 56,000,000 is supported on a cultivated area of 17,000,000 acres, which comes to about one-third of an acre per head as against India's five-sixths of an acre.* In India, we have scarcely yet made a beginning in proper intensive cultivation on modern scientific

* See Sir Visvesvaraya : *Reconstructing India*, p. 174.

lines in spite of the fact that methods of extensive cultivation are highly inappropriate owing to the large size of the agricultural population and the prevalence of small holdings.

§ 6. Relative importance of crops :—The areas under the different crops show, in the first place, the varied character of agricultural production in India, which enables the country to be self-sufficing in respect of its food-supply and a large variety of raw materials. In the second place, the relative importance of the different crops is also indicated. Food-crops preponderate largely and account for 81·2 % of the total sown area and non-food crops account for 18·8 %, though there is a tendency manifested by the area under the non-food crops like cotton, jute, oil-seeds etc. to increase faster than that under food-crops under the stimulus of high world-prices. Among the food-crops, rice stands easily first; then come Wheat, Jowar, Gram and Bajra. Among the non-food crops, fibres (cotton, jute and others) are the most important and account for 8·5 % of the total sown area. Cotton is by far the most important of the fibres. Oil-seeds come next and account for 5·9 % of the total sown area.

§ 7. A survey of the principal crops of India:—(i) *Rice*:—*Rice* is the leading crop of India as it is the staple food of most of the people of the country and occupies nearly 35 % of the total cultivated sown area, the total area devoted to its cultivation being 82·37 millions of acres yielding 30·63 millions of tons in 1925-26. India's contributions to world production of rice is about 40 % and she is the largest exporter of rice in the world, though her average exports seldom exceed 7 % of her total production.* *Rice* is grown extensively in India, especially in the wet and moist regions. The following figures illustrate the extent of its cultivation in the different provinces:—Bengal, (21·13) millions of acres; Bihar and Orissa (14·28); Burma (12·21); Madras (11·32); United Provinces (7·18); Central Provinces (5·08); Assam (4·58); Bombay (3·87). *Rice* is the staple food of the Eastern provinces and Burma. Burma has practically

* Cotton, p. 133.

the monopoly of the export trade in rice and also makes good any shortage in the supply for local consumption in other parts of India, because the ratio of acreage under rice to population is so high in Burma that her exportable surplus is far larger than that of Bengal, Bihar or Madras, who grow more rice but have to meet a much higher internal demand. The Burma trade represents between 70 and 75 percent of the whole.* India exported 24·8 lakh tons of rice worth 39·97 crores of Rs. in 1925-26. In 1626-27, the figures were respectively 20·5 and 33·19. The exports vary from 7 to 9 % of the total production. Rice is a winter crop being mainly harvested in December and January. There are different varieties of paddy grown in different parts of India depending upon local conditions and knowledge. It is probably due to the magnitude and complexity of the subject that little progress has so far been made with this crop by the agricultural departments (Mackenna p. 46).

(2) *Wheat* :—Wheat stands next to rice in acreage covering as it does, 10 % of the total cultivated area. Wheat is a rabi crop in India and is sown from October to December and harvested from March to May. It is the staple food of the people in the Punjab, United Provinces and N. W. F. Province. The total area under wheat in India was 30·47 million acres in 1925-26. Elsewhere it is grown mainly for export. ~~The principal wheat producing~~ provinces in India are the Punjab (10·68 million acres), U. P. (6·99), Central Provinces and Berar (3·63), Central India States (1·85), Bombay (1·74) and Bihar and Orissa (1·16). The United Provinces and Punjab account for nearly two-thirds of the total area and three-fourths of the total yield. " India produces about one-tenth of the world's wheat. The five principal countries exporting wheat in the pre-war times were the U. S. A., Russia, Canada, the Argentine Republic and India in that order. As regards production, India occupies the third place." § During the war there was a considerable extension in the area under wheat in India, from 28·47 million to 35·48 million acres on ac-

* Cotton, p. 135.

§ Ibid, p. 144.

I, E. 26.

count of the purchases made by Government. The export trade in wheat has been growing since the opening of the Suez Canal in 1870. The exports of wheat, however, fluctuate considerably according to the nature of seasons in India and abroad. In normal years, about 10 % of the wheat is exported from India. "In years of famine the local price is generally so high that the parity of prices in Europe is exceeded and the volume of export falls to a very low figure."* In 1924-25, 11'11 lakh tons of wheat were exported valued at Rs. 17.19 crores. In 1926-27, the figures were respectively 1'76 and 2'71. Wheat cultivation has received a considerable stimulus from improved transport and from irrigation, especially in the case of the new canal colonies of the Punjab. "Indian wheat at one time had the reputation of being dirty, but it was established that this was not due so much to careless threshing or handling as to deliberate adulteration to conform to the practice of the English grain trade."‡ Since 1907, there has been a considerable improvement in this respect. The introduction of the Pusa 12 variety by the Agricultural Department has improved the quality of the grain which must be further raised and kept up to enable the Indian wheat to obtain the same prices as Canadian and American wheat in the world's market.

(3) *Barley* is chiefly grown in the U. P. (4'11 million acres) and Bihar (1'32). There is only a small export of barley (2 thousand tons valued at 62 laks of rupees, in 1926-27), because the internal demand is very great. Barley is used as food both for man and cattle.

(4) *Millets: Jowar*;—There are two varieties of Indian millets, Jowar and Bajra, and they constitute an important group of food crops for the masses of Madras, Bombay (Deccan), and the adjoining districts of Hyderabad. They supply also valuable fodder for the agricultural cattle. They do not need as thorough a cultivation as wheat and are rarely manured. There is a large area under them, 29'58 millions acres under Jowar

* Cotton, p. 145.

‡ Ibid, p 147.

and 12.25 under Bajra in the whole of India (in 1925-26). The principal Jowar growing provinces are Hyderabad (Dn.) (9.04 million acres), Bombay (8.31), Madras (4.54), C. P. (Berar) (3.84), U. P. (1.99). So also Bajra is extensively grown in Bombay (4.65), Madras (3.07), Punjab (2.56), United Provinces (1.57) and C. P. (1.14). Bajra is a kharif crop while Jowar is both a kharif as well as rabi crop. There is no considerable export of either of the millets. In 1926-27, fifteen thousand tons of Jowar and Bajra valued at 20.50 lakhs of rupees were exported.

(5) *Pulses* are extensively grown throughout India and figure prominently in the dietary of the people. They are chiefly grown in U. P., Punjab, Bombay, C. P. and Bengal etc. Gram is easily the leading pulse in India, and in 1925-26, no less than 14.30 millions of acres were under it, U. P. (6.64) being the most important province in this respect. Exports are comparatively limited on account of the large internal demand. In 1925-26, 30615 tons valued at 44.53 lakhs were exported.

(6) *Other food crops*:—These include fruit and vegetables, condiments, spices, accounting for a total area of 7.75 million acres in 1925-26. Fruits and vegetables including root crops accounted for 5.17 million acres. India grows a variety of fruits, such as mangoes, apples, oranges, etc. The fruit owing to shortage of supply and the general ignorance of the masses has prevented any considerable development of the fruit industry. There is a large variety of vegetables grown in India, potatoes, onions, brinjals, cabbages, cauliflower, turnips, tomatoes etc. A considerable extension of area under fruit and vegetables is possible with suitable irrigation facilities, especially in areas adjoining the larger cities. The Agricultural Department has not been able to fulfil the expectations of a new era with regard to the supply of fruit and vegetables on account of the much more important work which demands its attention.* Condiments and spices accounted for 1.36 million acres in 1925-26. Spices are chiefly grown in the extreme

* Mackenna 77.

south of India, though certain varieties are cultivated everywhere. Pepper (in Malabar, Travancore, South Canara, Coorg and to some extent in Bengal etc.); chillies (chiefly in Madras, Eastern and Northern Bengal, some districts in Burma and Bombay; ginger (Malabar coast, Surat and Thana districts of Bombay and a few districts of Bengal and U. P.; Cardamom (the humid forests of Western and Southern India, Madras, Travancore, Mysore, Coorg and Bombay (chiefly in the Canara District); Betelnut (Southern India and Burma); Cinnamon (Western Ghats in Southern India; and Cloves (chiefly in the foot-hills of the Western Ghats in the Madras Presidency) are the chief among the spices of India. There is some export trade in them, which amounted to 3·21 lakhs of cwts valued at 1·55 crores of rupees in 1926-27.

(7) *Sugar* :—"India was probably the original home of sugarcane and the area of sugar is larger than in any other country in the world. But the average yield per acre is so low and the demand from a population that is largely vegetarian is so great that the country depends to an increasing extent upon imports of cheap foreign sugar.† India imported 9·24 lakh tons of sugar valued at over 19·16 crores of rupees in 1926-27. It is stated by the Indian Sugar Committee that India's outturn of actual sugar per acre is less than one-third that of Cuba, one-sixth of Java and one-seventh of the United States. The imports of the Austrian and German beet-sugar have been largely replaced—thanks to the countervailing import duty—by bounty-fed German sugar imposed in 1903—by growing imports of cane-sugar from Java and Mauritius. This foreign competition has hit Indian sugar cane hard and in the years preceding the war there was some decline in the area under cultivation. The ground lost was regained to some extent by 1918-19 under the stimulus of a rise in the war-time values. The total area under sugarcane was 2·977 million acres in 1925-1926. The chief cane-growing provinces of India are U. P. (1·43 million acres), Punjab ('39), Bihar and Orissa ('29), Madras ('11), Bombay ('083), Assam ('041). Thus Northern India has a predominant interest in the crop. Though the area in Southern

† Cotton p. 317.

* Fiscal Commission's Report p. 17

India is small, the cane grown there is much thicker and finer than in Northern India. In India, the manufacture of white sugar is not common. The juice is boiled down without removing the molasses and the product called Gur or Gul is consumed as such. Sugarcane is now crushed by the iron crushers which have largely replaced the old wooden ones. White sugar is manufactured at a number of factories especially in the U. P. and Bihar and Orissa. Bombay has also recently made a beginning in this direction. The Indian refined sugar industry is, however, not in a prosperous condition, suffering as it does from several handicaps such as the competition of foreign sugar, low yield per acre of sugar-cane, absence of up-to-date methods of extracting juice, poor yield of molasses, difficulty of getting a sufficiently large supply of cane from near the factory and the heavy capital charges of the undertakings. Owing to the growing consumption of imported white sugar in preference to Gur, sugar-cane cultivation also is declining. Government have taken up the question and sugar-cane has since 1901-02 been subjected to a systematic study with a view to improve its quality and the supply of canes and recently a cane-breeding station has been started at Coimbatore in Madras. The Government of India appointed a Sugar Committee in 1919 to investigate the possibility of organizing and developing the sugar industry in India. The Committee published their report in 1921, which recommends the organisation of the sugar industry on the Java model with suitable modifications and with the help of a Sugar Board. It is also suggested that there should be an Imperial Research Institute with three divisions, agricultural, chemical and engineering, to control work on the research stations in the various provinces. The Sugar Board would guide the Research Institute and advise Government on all matters regarding the sugar industry. A Sugar School forming an integral part of the Institute to train and qualify men both in the field and the factory has also been proposed. It is necessary to bear in mind that raw gur is produced and consumed in India on a large scale (2.97 million tons in 1925-26), and hence attention must be given to the indigenous industry of gur-making as well as to the production of cheap white sugar. The Agricultural

Departments and especially the Imperial Coimbatore cane-breeding station are concentrating their efforts on the increase of out-turn by introducing improved varieties of cane. This class of work may be regarded as common to both aspects of the question. It is hardly necessary to add that there is only a negligible export of raw sugar, which in 1926-27 was valued at 6.92 lakhs of rupees and goes to Ceylon, the Straits Settlement and Fiji for the Indian population there.

(8) *Coffee* :—The origin of the coffee industry in India is obscure. It is, however, commonly believed that it was introduced in India by Baba Budan returning from pilgrimage from Mecca in the 16th century. It is, however, only from 1830 that the systematic cultivation of coffee dates. A large area was put under coffee in Mysore, Coorg and the Nilgiris. The industry reached its zenith in 1862. After this date decline set in owing to the appearance of the destructive beetle. Latterly also the import of cheaper Brazilian coffee in the European markets has adversely affected the Indian cultivation, which has gone down. In some of the coffee-growing areas, coffee has been replaced by tea. In 1925-26, the area under coffee in the whole of India was 148,200 acres, the principal regions being the Mysore state (75,500 acres), Madras (34,700), Coorg (34,800), Cochin, Travancore, and to a smaller extent, Burma and Bombay. In 1925-26, 150,000 cwts. were exported from British India and were valued at 1.32 crores of rupees.

(9) *Tea* :—Perhaps with the single exception of China India is the largest tea producer in the world.* During the latter half of the 18th century, Chinese tea formed an important and lucrative branch of the export trade of the East India Company. Towards the end of the century, a suggestion was made to develop an alternative source of supply in India. It was, however, only in 1834 that the matter was taken up seriously at the instance of Lord William Bentinck. Government plantations were established in Assam growing Chinese seed, the existence of the indigenous plant in Assam being unknown yet. In 1852, it was finally established that Indian tea could compete with

* Cotton p. 195.

Chinese tea in the London market. In view of its rapid progress Government connection with the industry ceased in 1865 and it has since been financed and managed by European capitalist companies. The tea industry has enjoyed a long spell of prosperity with growing internal consumption and foreign exports. In 1925-26, the area under tea in British India was 728,857 acres, of which Assam contributed 416,577, Bengal 187,700, Madras 50,445, Punjab (Kangra) 9,635, U. P. 6,655 and Travancore 51,100 and the total yield was 363·5 millions of lbs. in 1925-26. " Every garden of any importance has its own factories, where tea is prepared for the market, as it is essential that the various processes should be carried through immediately after the leaf has been plucked. The better organised factories are elaborately equipped with highly specialised plant and are under the supervision of expert tea makers."§ There is a very large export trade in tea, especially with the United Kingdom, which takes about 75% of the Indian exports. In 1926-27, 349·26 millions of lbs. were exported valued at Rs. 29·03 crores. Tea is thus an important staple of export. The consumption of tea in India is rapidly growing, thanks to the activities of the India Tea Association, to which the proceeds of a small cess, levied since 1903 at the request of the industry, are handed over. The Association utilises a part of these for pushing forward the sale of Indian tea in foreign markets.

(10) *Non-food crops : Oil seeds* :—India grows a variety of oil-seeds such as linseed, sesamum, rape and mustard, groundnut, coconut, castor, cotton-seed, mowra, niger, coriander, cummin, ajwan, kardi. They account for a total area of 15·15 million acres in British India. A large quantity is exported annually. In 1925-26, 1,250 thousand tons of oil-seeds valued at 29·63 crores of rupees were exported. In 1926-27, however, the exports fell to 838,000 tons valued at 1,908 crores of rupees. The proportion of oil-seed exported varies considerably with the different seeds. Linseed, for instance, is grown mainly for export, whereas the export of groundnuts, rapeseed and sesamum probably does not exceed 20% of the total production. In the aggregate, however, the exports of oilseeds

§ Cotton p. 196.

form a large item in India's foreign trade.* Several points of criticism have been urged against these exports which we shall notice in connection with our general review of the exports of agricultural products. A few words may now be said regarding the principal oil-seeds :—

(i) *Linseed* is cultivated for its seed and not for its fibre. Practically all the seed and the resultant oil and cake are exported. The total area under linseed in India was 3·57 million acres ‡ in 1925-26, (C. P. 1·22, Bihar and Orissa ·68, U. P. ·38, Bombay ·12 and Bengal ·13).

(ii) *Sesamum* variously known as till or jingelly is grown practically in all the provinces, especially Burma 1·09 million acres, Madras ·79, C. P. ·45, Bombay ·59, Hyderabad (Deccan) ·52, U. P. ·25, Punjab ·11, Bengal ·15. The total area was 4·9 millions in 1925-26†. About 50 % of the world's supply is found by the British Empire to which India contributes half and exports a large quantity.

(iii) *Rape and mustard* together account for 5·6 million acres including 2·4 million acres of mixed crop in U.P., the whole of which is in Upper India, chiefly in U.P. (2·57, including mixed crop), Bihar and Orissa (·74), Bengal (·73), Punjab (·78), Bombay (·18), Assam (·35) in 1925-26. In the pre-war period about 20% of the total production was exported.

(iv) *Groundnut* is one of the most important oil-seeds and has shown striking expansion in recent years. The total area of 3·97 millions acres in 1925-26 was mainly distributed as follows:—Madras (2·5) millions, Bombay (·68), Burma (·49). Thus the crop is of great importance in these Provinces. There was a considerable decline in exports and area about the end of the last century on account of marked deterioration of the indigenous varieties. The successful introduction of disease-resisting exotic varieties from Senegal and Mozambique, however, led to a recovery and steady expansion since 1901. Con-

* See Fiscal Commission Report p. 17.

‡ Includes ·70 million acres of mixed crop in U. P.

† Include ·66 millions acres of mixed crop.

siderably more than half of the crop is retained for home consumption, the remaining portion being exported. In 1926-27, groundnut valued at 9.5 crores of rupees was exported. The Department of Agriculture has succeeded in increasing the yield of groundnut even on light soils on which it has been found to grow well.

(11) *Fibres*:—These constitute an important group of crops accounting for 8.5% of the area cultivated in British India.

~~He~~ *Cotton*:—Cotton is easily the premier fibre crop of India. The statistics in regard to cotton are striking. The area under cultivation was, in 1925-26, 18.18 million acres in British India, and 28.49 millions, if the area in the principal Indian states is included. The yield of the crop in the same year was 6.50 million bales of 400 lbs. each. There is a large export trade in raw cotton, more than 50% of the crop being sent out. Cotton is indeed the first article of the export trade of India, and there has been a striking increase in the value of the exports during the last few years. In 1915-16, 4.4 lakhs of tons valued at 24.97 crores of rupees were exported. In 1925-26, 7.4 lakhs of tons valued at 95 crores were exported, though the exports declined in 1926-27 to 5.6 lakhs of tons valued at 58.66 crores of rupees. The area under cotton has also increased considerably in certain tracts at the cost of food crops. The average of the years 1895-1900 was 13.86 millions of acres, while 28.49 million acres were returned as being under cotton in 1925-26. The principal cotton provinces of India are Bombay (8.11 million acres), C. P. and Berar (5.48), Hyderabad (3.78), Punjab (3.05), U. P. (1), Madras (2.92).^{*} So far as the area under cotton and total outturn go, India stands next to the United States of America. Indian cotton is for the most part short staple, the lint being short and coarse in fibre as compared to that of the American and the Egyptian cotton. It is, therefore, unsuited to the manufacture of cloth of higher counts such as that turned out by the Lancashire mills. The chief consumers of Indian cotton are Japan and the Continent. Of the total value of 95 crores of rupees worth of cotton export in 1925-26, Japan alone took 47.47 crores worth. The yield of cotton per acre in India is, however, low being between 75 and 100 lbs. of lint cotton only, as compa-

^{*} The figures refer to the year 1925-26.

red with 180 lbs. in the U. S. A. and 300 to 400 lbs. in Egypt. The Agricultural Department—which was indeed started originally on the initiative of Lancashire—has for some years directed its efforts towards the improvement of the quality and the increase of the yield per acre of the indigenous varieties. It has also tried to introduce exotics—especially long staple cotton—and to produce hybrids. Conditions in many parts of India are not favourable for the cultivation of the exotic varieties and greater attention has, therefore, to be paid to the improvement of the indigenous varieties. “Egyptain and Upland American cottons have been introduced in Sind, the latter with most prospect of success.” The completion of the Sukkar Barrage Irrigation Project is expected to increase the area under such cottons. Another notable achievement is the introduction of the Cambodia cotton in Madras since 1904. In Bombay, Punjab and the United Provinces also, the American cotton has been introduced.

The war brought into the foreground the question of making the British Empire self-supporting in respect of its cotton supply and, among other reasons, led the Government of India to appoint* the Indian Cotton Committee in September 1917, to examine the possibilities of increasing the supply of long-staple cotton in India, to suggest improvements in the existing methods of ginning and marketing, to make recommendations in regard to the prevention of adulteration, damping and mixing etc. The report of the Committee, which was issued in April 1919, is divided into two parts, agricultural and commercial. The agricultural section refers to the methods by which the quality and yield of cotton can be improved and specially emphasises botanical work and improvement in agricultural practice. It recommends the organisation and extension of the Agricultural Department and recommends the extension of the area under the cultivation of long staple cotton with the help of irrigation, particularly in Sind, Punjab, N. W. F. Province, the United Provinces and to a certain extent in the Peninsula. The Committee, desiring to secure an adequate price to the grower, especially of pure or superior varieties of cotton, make a number of helpful recommendations in favour of open markets

* Indian Year Book, 1928.

on the Berar model to ensure full knowledge for the purchaser in regard to the stuff he is buying, the extension of co-operative sale societies, licensing of cotton-ginning and pressing factories and restrictions on transport of cotton to prevent the malpractices of adulteration, mixing and damping. The Committee further recommend improvement in cotton forecasts and other statistical information. The improvement of the cotton trade by the organisation of a Central East India Cotton Trade Association in Bombay is also recommended. Lastly, the establishment of a permanent Central Cotton Committee to ensure closer touch between the Agricultural Department and the Cotton Trade is suggested. The Committee consisting of about twenty official and non-official members, it is suggested, should be an advisory body which should be consulted by Government about any proposed legislation and the working of the licensing system. The Committee would carry out authoritative valuations of new varieties of cotton and spinning tests. After some delay, action on the proposals of the Committee has been taken. The East India Cotton Trade Association was formed in 1922. The Central Cotton Committee held its first meeting in 1921 in Bombay. The Committee has already promoted a Cotton Transport Act to prevent the adulteration of cotton, which having been applied in the first instance to Bombay, where it met with encouraging success, has been extended to Madras. A Cotton Ginning and Pressing Factories Act—a corollary to the Transport Act—has been enacted in 1925-26. The Indian Central Cotton Committee have established a Technological laboratory in Bombay for carrying out spinning tests etc. In co-operation with the Central Indian states, the Committee have started experimental work on cotton through the agency of the Institute of Plant Industry at Indore. Special research schemes in various provinces are also being promoted by the Committee. The Committee's activities are financed out of the proceeds of a small cotton cess levied upon the cotton bales produced in India. In Bombay, a Cotton Markets Act has been passed recently (1927). The only comment that we need make here relates to the necessity of devising measures for the use of the improved varieties of cotton in the country itself with a view to lessen our dependence upon foreign cloth. It is a great pity that

in spite of its large supply of raw cotton, India has to look to other countries for nearly half of her total need for cloth. While the measures for improving the lot of the grower are certainly to be welcomed, the Cotton Committee ought not to regard the meeting of Lancashire's demand for long staple cotton as its only or principal object.

(ii) *Jute* is the next most important fibre after cotton. India enjoys a monopoly as the world's sole producer of jute. Its cultivation is restricted to the Ganges-Brahmaputra delta in Bengal and the province of Assam with the adjoining Indian state of Cooch Bihar and Orissa. The soil here is enriched by alluvial deposits brought by river inundation and is thus suited to grow this exhausting crop without any expenditure on manure. In 1925-26, the total area under jute was 3,115,000 ac. the inland contributing 2,685,000 acres (83% of the total area). About 10% of the area is under the cultivation of higher yielding and disease-resisting strains of the two main species cultivated. The introduction of jute cultivation in the Ganjar tract of the U. P. has proved a success. The area under jute and the yield of fibre have largely increased during the past fifty years. The export aspect of the crop is only second in importance to that of cotton. In 1926-27, 70.8 lakh tons of raw jute valued at Rs. 26.78 crores and jute manufactures valued at Rs. 53.18 crores were exported. Germany is now the largest customer for India's raw jute taking 27.6% of the total quantity. The United Kingdom comes next with 22.9% of the total quantity, other importing countries being Spain, France, Japan, China, United States, Italy, Belgium etc. The export of raw jute commenced as early as 1795, but the quantity was small to begin with. The demand on the part of the Dundee power-looms had come to be considerable by 1832. The handloom industry in Bengal had, however, still sufficient vitality up to 1850 to ensure an excess of exports of manufactured jute goods over those of the raw material. The cutting off of the United Kingdom from the supplies of the Russian flax during the Crimean War led to the exploitation of jute as a commercial fibre of the first importance and resulted in increased exports of raw jute, which totalled nearly 9,000,000 tons in 1908-9, the two principal customers being U. K. and Germany. During the war years, exports declined considerably, though there

has been some recovery since its cessation. The progress of the jute manufacturing industry will be traced elsewhere. It may be pointed out here, however, that the Jute Industry has shown uninterrupted progress and in the pre-war years, the Indian manufactures of jute increased faster than the exports of raw jute, a tendency stimulated further by the War. In 1925-26, the exports of manufactured jute were 15% greater than before the war in the case of bags and 37% greater in the case of cloth.*

(12) *Indigo*:—Indigo has had a highly chequered history which goes back almost to the beginning of the Christian era. "Originally the industry in Western India was in Portuguese hands, but about 1778, the East India Company revived it in Bengal and gave it direct encouragement for the next twenty years, and when about 1837 the industry migrated to Tirhoot and the United Provinces, India recovered the foremost place among the indigo-producing countries of the world from which she had been temporarily ousted by the West Indies. India's position remained unassailed.....until German laboratories found themselves in 1897 at last in a position to produce indigo (indigo had actually been synthesized nearly thirty years earlier) on a commercial scale. The fate which had already overtaken the *madder* and the lace-dye industries thereupon threatened the factories of Bihar."§ The Indian exports were seriously affected. Until 1907-8, indigo represented more than half the value of dyeing and tanning materials exported, but in 1913-14 this percentage had fallen to one-fifth. The area under cultivation fell from 1,688,901 acres in 1896-97 to 172,600 acres in 1913-14 and the exports from 169,523 Cwts. to 10,939 Cwts. The natural indigo industry received a temporary stimulus from the War, which closed the markets of the world to the synthetic substitutes and raised the price of indigo. There was a partial recovery made by the area under cultivation which rose to 770,000 acres in 1916-17 and by the exports which rose to 41,932 Cwts. in 1915-16. There has been, however, again a set-back since the close of the War. In 1925-26, 2000 Cwts. of indigo valued at 4.24 lakh of Rs.

* See India in 1925-26, pp. 309-10.

§ See Cotton, *Handbook of Commercial Information for India*, p. 264.

were exported. Opinions differ regarding the prospects of the industry which do not seem to be bright and the future of the industry is uncertain. Salvation lies only in cheaper production both as regards cultivation and manufacture. In 1915 the Delhi Conference considered the question of assisting the industry from three points of view—agricultural, research and commercial. In 1918, an indigo cess was levied on exported indigo, the proceeds of the duty to be expended by the Government of India on scientific research work in connection with the cultivation and manufacture of indigo. Investigations are being conducted at the Pusa Research Institute by the Indigo Research Chemist to the Government of India.

The area under indigo cultivation in 1925-26 was 135,300 acres, the principal contributors being Madras, U. P., Bihar and Orissa, Bombay and Bengal. Bihar is the most important from the point of view of foreign trade and it is here that the dye is systematically extracted and marked under European supervision. The bulk of the indigo produced in Bihar factories is exported from Calcutta. The chief customers for Indian indigo are China and Japan.

(13) *Opium*;—The area under opium has declined progressively as a result of the policy of the Government of India of stopping all exports to China under the agreement of 1907 with that country and of controlled internal consumption. There has been a striking decline from 614,879 acres in 1906-7 to 83,030 acres in 1925-26. The cultivation of poppy is carried on under a system of Government licenses and is now practically confined to the United Provinces (81,008 acres).

(14) *Tobacco*;—The tobacco crop is believed to have been introduced in India by the Portuguese early in the 17th century. Government, since the days of the East India Company, have directed their efforts towards improving the indigenous methods of curing and manufacturing and towards providing a better quality of leaf. There are three principal centres of the tobacco industry. Eastern and Northern Bengal, Southern India and Lower Burma. In 1925-26, the total area under tobacco was 1,964,862 acres, the leading contributors being Madras, Bengal, Bihar and Orissa,

Bombay, Burma, U. P., and Punjab. The bulk of the tobacco grown in India is consumed locally, but there is an export trade of considerable value in unmanufactured tobacco chiefly from Madras and Rangoon. In 1925-26, 38 million lbs. of tobacco valued at 111.40 lakhs of Rs. were exported. As regards manufactured tobacco, the value of the imports has always exceeded that of the exports and the difference has recently been accentuated by the increased consumption of cigarettes. This demand has encouraged the opening of a number of factories for the manufacture of cigarettes in India. Indian leaf tobacco makes an excellent filler but is generally unsuitable for wrappers. The deficiency is met by a considerable import of leaf from Sumatra and Java. The Botanical Section of the Agricultural Research Institute, Pusa, has directed its attention to the question of improving the quality of Indian tobaccos especially in the direction of hybridisation of new kinds of tobaccos. The heavier import duties levied on tobacco are also calculated to stimulate the cultivation and consumption of Indian tobacco.

(15) *Fodder crops*:—The area under fodder crops has increased from 2.94 million acres in 1901-2 to 8.93 million acres in 1925-26, the principal areas being in the Punjab (4.2), Bombay 2.1, U. P. (1.2) etc. In spite of this increase we may say that the area devoted to fodder crops is insignificant in view of the large number of cattle that must be maintained in a state of efficiency in an agricultural country like India. The Agricultural Department has of late years given much attention to the question both of growing and storing fodders. The successful introduction of the famous Egyptian clover and soil renovator in Sind, Bihar, the C. P. and N. W. F. P. and the cultivation of Berseem at Pusa may be regarded as creditable achievements of the Agricultural Department in this connection.

§7. *Exports of agricultural products*:—In the foregoing survey* of the principal crops of India something has been said about their export aspect. It is, however, now necessary to treat the whole subject of the exports of agricultural products separately.

Statistics of export:—As a preliminary to the discussion of this question the following statistics of exports of food stuffs and raw materials may be given:—

* We have drawn freely on Cotton's Handbook for this survey.

(a) Exports of food-stuffs. Quantity and value of exports.

Quantity (figures in thousands)		Value (Rs. 1,000)			
		Pre-war average	War average	Post-war average	1926-27
Pre-war Average	War average	1925-1926	1926-1927		
Grain, pulse and flour.					
Rice (in the husk) tons	42	35	23		23,75
Rice (not ")	2,398	1,462	2,035		32,95,92
Wheat	1,308	807	176		2,71,07
Wheat flour	55	56	59		1,32,38
Pulse	159	129	118		1,75,24
Barley	227	198	42		2,09,16
Jowar & Bajra	41	41	15		56,23
Other sorts	181	192	1		18,04
Total	4,411	3,141	2,429		6,30
Tea lbs.	266,497,322,691	321,169,325,733	349,264		39,24,90

(b) Exports of principal materials (agricultural)

Quantity (figures in thousands)		Value (Rs. 1,000)			
		Pre-war average	War average	Post-war average	1926-27
Pre-war Average	War average	1925-1926	1926-1927		
Fibres					
Cotton (raw) tons	430	391	521		58,60,31
Jute (raw) "	764	464	554		37,24,57
Total fibres	1,194	855	1,075		132,93,85

	Quantity (figures in thousands)					Value (Rs. 1,000)				
	Pre-war average	War average	Post-war average	1925-1926	1926-1927	Pre-war average	War average	Post-war average	1925-26	1926-27
<i>Oil seeds.</i>										
Essential	tons 10	8	9	10	7	20,57	24,16	35,88	30,72	23,61
Non-essential										
Linseed	379	270	251	308	192	7,98,90	4,94,94	7,57,72	8,08,53	4,02,09
Groundnut	212	119	195	455	368	3,52,57	1,91,17	5,61,97	12,02,33	9,58,27
Rapeseed	273	91	206	112	94	4,14,69	1,43,01	5,07,37	2,68,09	2,16,77
Sesamum	119	33	28	40	2	2,48,15	67,35	1,02,73	1,17,34	4,83
Castor	114	89	48	110	102	1,66,43	1,57,55	1,14,54	2,67,69	2,03,73
Copra	31	16	7	..	2	1,10,43	60,73	28,84	74	8,30
Cotton	240	69	155	197	51	1,79,98	50,25	1,88,05	2,18,11	45,27
Mustard	4	3	2	3	1	10,08	9,16	9,75	11,03	3,29
Moha	29	3	8	1	14	42,53	3,04	12,79	1,81	23,18
Poppy	33	5	6	6	2	69,41	9,58	20,97	16,16	5,45
Other sorts	9	2	8	8	3	23,23	6,48	13,03	21,13	13,98
Total.	1,453	708	923	1,250	838	24,36,97	12,17,42	23,53,64	29,63,68	19,08,77

‡ Percentage of exports of certain principal crops to total production:—

	Pre-war average	War average	Post-war average	1925-26	1926-27
Rice	9	5	5	8	7
Wheat	14	9	3	3	2
Tea	96	89	95	90	91
Cotton, raw	56	51	61	69	64
Jute, raw	51	31	48	46	37
Linseed	73	63	59	77	47
Rape and mustard	23	8	19	13	10
Sesamum	25	8	6	10	5
Groundnuts	35	12	19	24	16
Indigo	40	44	27	7	8

The following table shows the comparative importance of the principal food-stuffs and other agricultural products in the export trade.

Percentage of proportion to the total value of all exports of merchandise* :—

Cotton, raw	19'62	Oilcakes	'84
Grain, pulse & flour	13'2	Spices	'52
Tea	9'63	Coffee	'44
Jute, raw	8'88	Fruits & vegetables	'32
Seeds	6'33	Tobacco	'35

§ 8. Restrictions on the export of food stuffs:—Is the export of food-stuffs and raw materials revealed by these statistics a matter for congratulation or for alarm? There are *two divergent views on the subject*. One view is that this export is a sign of increasing prosperity. It shows that the country is taking

‡ Review of Trade 1926-27, p. 203.

* The total value of all exports from British India in 1926-27 was Rs 3,01,43,16,000. Review of Trade, 1926-27, p. 57.

advantage of the high world prices for its products and is sending out the surplus that remains after meeting the need of the home population and is importing, by way of payment for her exports, cheap manufactured articles which cannot be produced profitably within the country itself. According to this view, the exports represent "a true surplus, that is to say, a margin which India can relinquish during periods of good harvest and a reserve on which she can draw for her own local requirements in times of scarcity"* (Lindsay)

The other view is that the export of food-stuffs and raw materials is not a true surplus in the sense that it represents a balance that remains after the needs of the country have been fully met and that it is advisable, in the true interests of the country, to prohibit or to restrict this export by heavy duties. It is criminal, so it is argued, to allow an export of the country's food-stuffs when large sections of the people are living on the verge of starvation and to look on complacently while a drain to foreign countries is going on unchecked, of valuable raw materials which are badly wanted for the development of the indigenous manufactures.

In connection with this controversy, we must emphasise a simple truth which is often forgotten, namely, that it is inadmissible to infer, from the mere fact of export to foreign countries, that the wants of the people in the exporting country in respect of the commodities exported must have been fully satisfied. The phrase "true surplus" generally employed in this connection is unfortunate because it suggests that there is such a thing as a "false surplus." Strictly speaking, all surpluses that are exported have the same scientific character; they are due to the fact that there is no demand for them in the country of origin at the ruling prices. By demand, as every tyro in economics knows, we understand not merely the desire to possess a thing but such desire backed by adequate purchasing power. Every country has its poor and by poverty we understand an insufficiency of the necessities of life. If the United States export wheat, this is not because every individual American has all the food he can

* *Economic Resources of the Empire*, edited by T. Worswick, p. 145

consume; similarly, in India, the export of food-stuffs does not mean that nobody in the country has any use for the food that is exported. The only difference between India and the United States is that, relatively to the latter country, the former has a very much larger proportion of people whose demand for food is ineffective. It is a difference in degree, not in kind. When, therefore, the Fiscal Commission remark sapiently with regard to the export of rice and wheat from India that, "at existing prices the efficient demand of India is satisfied, and there remains a surplus available for export",* they are saying something which is perfectly true but also perfectly useless. At "existing prices" whether high or low, "efficient demand" is always satisfied. But in spite of the satisfaction of "the efficient demand" for food, millions of people in a country may be underfed and that is patently the case in India.

There are two methods (which, however, are not mutually exclusive but may act together) of remedying this state of affairs. One is to depress the prices of food-stuffs so as to bring them within the reach of the low purchasing power of the masses and the other is to raise their purchasing power so as to make their demand effective at current prices.

One of the ways suggested for bringing down prices of food-stuffs is to prevent their export abroad. The question is, would prohibition of export or the imposition of heavy export duties give us the desired level of low prices, and if so, whether no injurious reactions on the economic life of the country will be set up by thus artificially lowering them?

It has been argued by those who oppose any deliberate attempt to bring down the prices of food grains by such means that it would naturally lead to the substitution for them of non-food crops like cotton, jute, oilseeds etc., unless these also come under the policy of restriction, and thus an attempt to cheapen the food-supply of the country would merely result in diminished production of food-grains and the situation, from the point of view of feeding the population adequately, would be worse than before.

* Report, p. 15b.

We need not dispute that prohibition or heavy export duties will, other things remaining the same, necessarily result in a certain shrinkage in the total production of food-stuffs. If the supply is very elastic, it is possible that the effect of this reduction will be to make the amount available in the country less than before. On the other hand, it is quite consistent with the admission that the supply would be curtailed to some extent, to hold nevertheless that there might remain a larger quantity of food available for the home market. Suppose, the quantity of rice exported amounts to three million tons annually out of a total production of 30 million tons, which leaves 27 million tons for home consumption. Now, if prices fall and the supply of rice is extremely elastic, the total production *may* go down to less than 27 million tons: but it is by no means certain that it may not go down only to say, 28 million tons, so that the supply available for the home market will be one million tons *more* than before. We cannot dogmatically lay down the proposition that prohibition will necessarily result in a smaller quantity remaining in the country than before. It may not be feasible for a good many cultivators to turn their lands on to the cultivation of the non-food crops. And in spite of falling profits, the cultivator may go on producing more or less the same quantity as before. Everyone who has the least acquaintance with the actual condition of the agriculturists in India, will realise how difficult it is for him to abandon the narrow groove in which he may be moving and quickly to respond to altered circumstances. *It is, therefore, not improbable that the food-supply in the country may increase as the result of the policy of prohibition.*

Another argument in favour of unrestricted export which has come into fashion of late is that *the export market puts the country in command of a surplus, whose existence is important in periods of local failures of the crops, which recur from time to time in India.* This surplus is grown because the export abroad provides a profitable outlet for it and it will disappear if the outlet is closed. § The question of adequate famine

§ See Fiscal Commission's Report, p 115 and K. L. Datta's *Enquiry into Rise of Prices in India*, p 93

relief, however, does not depend, in any great measure, on the availability of a surplus exported abroad in normal years. Having regard to the fact that the retention of the surplus in the country for meeting special contingencies, although it may bring some relief, will not make a great difference in the situation, because the quantity of the exportable surplus is insignificant relatively to the total food requirements of the country. Also, simultaneous failure of rains throughout the country is a comparatively rare phenomenon in India, and the problem presented by times of scarcity is one of quickly transferring supplies from regions of comparative plenty to those of relative scarcity, and it has been the well-justified boast of Government that the *highly efficient system of famine relief and insurance* elaborated by them has in recent times worked most admirably. It cannot, therefore, be urged that any such supplementary assistance in the task of famine relief as may be afforded by the possibility of diverting the exportable surplus to famine relief is in any sense urgently required.

While, therefore, we do not agree with these usual arguments in favour of unhindered exports of food-stuffs, we are nevertheless not convinced that a policy of restriction would be desirable. We have already hinted above that the exports represent relatively an insignificant proportion of the total production, so that even if they are wholly retained in the country, the impression that will be made on the prices of food-stuffs in general would be very slight, and what is more important, this slight gain will be at the expense of the cultivators, whose loss by a policy of prohibition in the case of wheat alone has been calculated at Rs. 16 crores.* Another minor point that is made by the Fiscal Commission is that agricultural improvements will be prejudicially affected by the policy under discussion. High prices benefit the more prosperous cultivators more than any other class and it is to this class, possessed as it is of the requisite capital and intelligence, that we must look for the introduction of improvements, and lower prices by reducing the prosperity of this class would make them less capable of undertaking this valuable

*Fiscal Commission's Report, p. 114

work. This argument, although it is ~~easy~~ to overrate it, must be admitted to be sound so far as it goes.

The only satisfactory method of cheapening food-grains is that of making agriculture more efficient and stimulate the production of food-grains. As regards the question of increasing the purchasing power of the masses so as to enable them to obtain the means of commanding a sufficiency of food, we have already hinted that this method should be adopted side by side with efforts to cheapen the food-supply.

Although we are not in favour of restriction on the export of food-stuffs in normal times, we recognise that abnormal conditions might arise necessitating temporary resort to heavy export duties. There may be a very serious local failure, or there may be an exceptionally strong demand for Indian produce owing to shortage elsewhere, as was the case during the War, and prices may threaten to rise to heights which it is unsafe to reach. In spite of considerable administrative and other difficulties involved in Government interference—difficulties abundantly illustrated by the control measures during the War—it may be necessary for Government to take such action not only with a view to relieving the situation, but also because public opinion may demand the adoption of emergency measures. It is true that rise in Indian prices owing to local shortage will automatically diminish the exports to world markets, but before this has occurred to the required extent, a considerable amount of export may have already taken place, and if the idea is to retain this for home consumption and to prevent a sharp rise in prices, Government will have to act as soon as they scent danger instead of waiting for the automatic remedy to come into action.

§ 9. Restrictions on the export of raw materials:—With regard to the export of raw materials it is not necessary to recapitulate the points raised in connection with the interpretation of the term “true surplus”. ³⁴

Several arguments have been put forward against the free export of the raw materials of industry derived from agriculture. In the first place, it is argued that the high prices secured for the export of such commercial non-food crops as cotton, jute and oil-

seeds have led to the substitution of non-food for food-crops and the utilisation of the best lands for the cultivation of such crops, food-grains being relegated to the inferior soils.* *The total area, however, occupied by the commercial crops at the expense of food-grains is very small compared with the total area under the latter.†*

It is no doubt true that the area under non-food crops is slowly but surely gaining at the expense of the area under food-crops, but the disparity between them as regards total production is at present so great and is so overwhelmingly in favour of food-crops,‡ that the contingency of the food-supply seriously contracting owing to the encroachment of the commercial crops is so remote that there is no immediate cause for anxiety. We do not think that the time has yet arrived for taking any special measures in the interests of the conservation of the nation's food resources, particularly by the drastic method of checking the production and the export of the commercial crops. We must not lose sight of the fact that the production of the commercial crops brings substantial profits to the cultivators engaged in it, and there is no strong reason at the present moment for interfering with the cultivator's freedom in the matter of growing such crops as appear most remunerative to him.

Another objection to permitting the free export of raw materials is that by such a policy the price of important raw materials of manufacturing industry such as cotton, jute and oil-seeds is made too high for the Indian industrialists to be able to hold their own against foreign competitors. If these exports are restricted, the Indian manufacturer will benefit by cheap raw materials—an advantage not available to the foreign manufacturer. While we admit the necessity of extending protection to the nascent industries of the country, we are doubtful of the efficacy for this purpose, of artificially lowering the prices of raw materials which after all contribute a very small proportion of the total value of the manufactured products. The necessary protection is much more effectively given by a system of bounties and protective import duties.

* See Datta's High Prices Inquiry Report, pp 64-65

† See p. 196 above.

A third argument is that the continuous cultivation of the land under heavy crops like cotton, jute etc. results in the progressive exhaustion of the soil. In this connection, it is alleged that the large export of oil-seeds and oil-cakes is particularly objectionable. The soil is subjected to a process of steady deterioration as it does not get back what is taken away from it. Protective export duties on oilseeds and heavy export duties on oil-cakes, bone and fish manures have been advocated, in order to put a stop to the alleged process of soil exhaustion. Incidentally, we may remark that the duty on oil-seeds is also supported on the ground that it will promote the growth of the local oil-crushing industry. As regards soil exhaustion, whether it is actually taking place is a matter of dispute;* but even supposing that progressive deterioration of the soil is not taking place, there can be no question that it will benefit by the application of more manure than is given to it under the present circumstances. From this point of view, a moderate export duty on oilseeds and oil-cakes may be advocated, provided that part of the proceeds from the duty be set aside to finance propaganda necessary in order to ensure increasing application of such manures which may be expected to fall in price to some extent and come within easier reach of the cultivator's resources, without at the same time inflicting serious economic injury on the grower of oilseeds.

It may perhaps be as well to add at this stage that, although we are inclined to reject some of the popular remedies, such as indiscriminate export duties on raw materials for bringing about an adequate development of industries in this country, we yield to none in our solicitude in behalf of such development. The fact that India is mainly a purveyor of raw materials to the industries of other nations in spite of her eminent suitability for industrial development is certainly an indication of economic backwardness, and until she succeeds in working up the bulk of the raw materials herself by establishing a full-fledged industrial system on modern lines, she could not be said to be utilising her resources to the best possible advantage.

* See p. 228 below.

§ 10. Low yield and its causes:—Although agriculture is practically the only national industry in India, it is conducted under highly unsatisfactory conditions and the average yield per acre of the different crops is consequently very much lower than in countries where agriculture is better organised. The following tables are intended to illustrate this fact:—

TABLE I

Low yield per acre of crops (average for India).

	1916-17 (lbs.)	1925-26 (lbs.)		1916-17 (lbs.)	1925-26 (lbs.)
Rice (cleaned)	969	833	Sesamum	229	189
Wheat	696	640	Groundnut	1,148	1,127
Sugarcane (raw sugar)	2,525	2,489	Cotton (Ginned)	83	88
Tea	571	499	Jute	1,296	1,194
Linseed	331	251	Indigo Dye	14	23
Rape & Mustard	411	364	Coffee	...	149
			Rubber	...	151

Estimates of Area and yield of Principal Crops in India, 1925-26.
(For table II see page 227.)

Referring to the relatively low productivity of Indian agriculture Sir Visvesvaraya writes, " On the normal pre-war basis, the average production of British India, including irrigated crops cannot be more than Rs. 25 per acre; in Japan, it cannot be less than Rs. 150. "*

Causes of low productivity :—One of the obvious causes of low productivity in India is the uncertain character of the rainfall. Apart from shortage and abnormal distribution of rainfall

* *Reconstructing India*, p. 174.

there are other causes such as floods, hail-storms, frosts and other vagaries of the climate which have an injurious effect on the crops. Irrigation supplies a partial corrective to deficiency of rainfall, but the effect of the other calamities mentioned above cannot altogether be offset by human contrivance. Much damage is also caused by wild animals, rats, locusts and other pests; and the various Agricultural Departments have addressed themselves with some success to the task of devising and popularising remedies against them.

TABLE II

* Yield per acre in India and some other countries (1922)

	Wheat (bushels 60 lbs.)	Corn (bushels 56 lbs.)	Barley bushels (48 lbs.)	Rice (lbs.)	Cotton (lbs.)	Tobacco (lbs.)
Canada	17·8	43·4	27·6	...	...	...
U. S. A.	13·9	28·3	24·9	1,090	141·0	735·6
England	31·2	...	31·0	...	...	...
Denmark	39·0	...	45·6	...	...	...
France	18·6	16·0	23·9	...	...	1,426·1
Italy	14·1	20·2	14·3	2,151	...	917·9
Germany	20·5	...	25·7	..	..	2,639·2 (1921)
Egypt	24·1	36·3	30·1	1,456 (1921)	299·0 352·0 (1923-24)	...
India	13·0	15·6	19·8	911	98·0	...
Japan	22·5	27·7 (1921)	31·7	2,477	...	...
Australia	11·2	25·7	21·3 (1921)	...	...	...

* *Agricultural Year Book*, 1923, United States, Department of Agriculture.

Inefficient tillage and the under-equipment of the agriculturist further account for the low yield. The problems arising in this connection as also the excessive subdivision and fragmentation of land leading to wasteful husbandry will be discussed later on.

§ 11. Is the soil progressively deteriorating in India?—While it is universally agreed that the productivity per acre is extraordinarily low in India, there is no unanimity of opinion as to whether this can in any measure be attributed to the progressively diminishing fertility of the land.

It has been asserted that in recent years the average yield per acre of food-grains has diminished and is diminishing. Assuming this to be so, however, it cannot be regarded as conclusive evidence of soil deterioration. It may well be due to the tendency of relegating the production of food-grains to inferior soils and reserving the better kind of soils for the cultivation of commercial crops such as cotton, jute, oil-seeds etc. The very general belief that the average yield per acre, not only of food but other crops as well, has diminished owing to progressive exhaustion of the soil may be partly due to the fact that with the increase in the demand for agricultural produce cultivation has been extended till it embraced the poorest and the most unprofitable lands. This would naturally diminish the average yield per acre. The cultivator's judgment in this matter is likely to be vitiated by his memory of times when only the better classes of land were under cultivation.

Apart from these considerations, *the weight of expert authority seems to be against the theory that in recent times the soil in India has been losing its power more and more with every year that passes.* Dr. Clouston, Agricultural Adviser to the Government of India, in his written memorandum to the Agricultural Commission, says, "Most Indian soils must have reached their maximum state of impoverishment hundreds of years ago and will not get any poorer even if cropped without manures for hundreds of years more. An average crop uses up about 20 lbs. of nitrogen per acre, but the loss is made up annually, for the soil gets nitrogen from the air and from the decay of root matter left in the soil after the crop is harvested, with the result

that most soils are not getting any poorer in nitrogen.....It was definitely proved at Rothamsted, the premier agricultural research station in the world, that the unmanured soil there did not reach its maximum state of impoverishment till after being cropped continuously with wheat for a period of forty years; since when the yield from year to year has remained almost stationary, despite the fact that no manure has ever been applied to the field. We may take it, therefore, that, with the exception of the limited area in this country the soils of which are deficient in phosphates, our old cultivated land has long since reached its maximum state of impoverishment; that increased yields now depend upon the rainfall, standard of tillage and manure applied; that only new land or lands deficient in phosphates are being impoverished by cultivation. "The evidence on this matter, however, is conflicting in character, the opposite view being represented by Dr. Voelcker who held that in the case of Indian lands generally, owing to exports of seeds, cotton and other products the soil constituents that are removed are not returned and consequently the soil is suffering continuous exhaustion. Even he, however, qualified this view by calling attention to the fact that a large proportion of the crops annually grown are of the size of cereals and also of the trees and shrubs and even the weeds, many of which are perennial in character, and may thus derive their nitrogen from the atmosphere." Mr. K. L. Datta after weighing all the evidence comes to the conclusion that "there is no statistical proof that any change has taken place in the fertility of any land in any part of India, either during the period under inquiry (1890-1912) or even during a much longer period."†

Fortunately, it is not necessary for us to make up our minds on this highly technical matter. The most important fact from our point of view is the low productivity of the soil in India which is not denied by anybody. It is also common ground between the contending parties, who differ on the question of progressive soil exhaustion, that it is highly important to improve

Evidence, Volume I, Part I, p. 32.

See K. L. Datta's *Report on the Enquiry into High Prices*, p. 17

Ibid p. 68.

the productivity of land in India, and further that proper care of the soil and the application of adequate quantities of manure are the only means for improving the yield. It is cold comfort to be assured that the soil cannot be deteriorating because the maximum state of impoverishment must have been reached long ago. For this after all means that things are already so bad that they cannot possibly get worse now, and the case for bestirring ourselves in order to rectify the situation remains as strong as ever.

CHAPTER VII

AGRICULTURE (continued): LAND

In this chapter we shall discuss the principal problems relating to Land as one of the factors of production under the headings of (1) Subdivision and Fragmentation of Holdings ; (2) Permanent Improvements ; and (3) Irrigation.*

Subdivision and fragmentation of holdings.

§ 1. The idea of an optimum holding:—One of the many causes responsible for the backwardness of agriculture in India and the impoverishment of the Ryot is the endless subdivision and fragmentation of land. As in manufactures so in agriculture, there is a certain scale of production which gives the best result from the point of view of the producer. After a certain point, any further decrease in the scale of production makes the relation between cost and yield less and less favourable until profit disappears altogether. There is, indeed, also a point beyond which it is not profitable to increase the size of a holding, but throughout the discussion on which we are about to embark, this possibility will be more or less completely ignored as being of no practical importance in India.

§ 2. Unit of cultivation and unit of ownership:—When we talk of a suitable size for a holding, what ^{or five acres of} we are really thinking of is the unit of cultivation and not necessarily the amount of land held in ownership, though the two tend to coincide in the Rayatwari tracts in India. As Mill points out, "It does not follow, because landed property is minutely divided, that farms will be so. As large properties are perfectly compatible with small farms, so are small properties with farms of an adequate size; and a subdivision of occupancy is not an inevitable consequence of even undue multiplication among peasant proprietors" provided, i. e. that the patrimony is not divided. Or as Nicholson puts it, "Large estates do not necessarily imply cultivation on

* The treatment of the important subject of Land Tenure has been relegated to a separate chapter later on.

a large scale, nor does a wider system of ownership necessarily imply small cultivation. The great estate may be let out in small farms, and a large farmer may rent land from several owners."*

If a cultivator's own holding is too small for economic cultivation, he may rectify this by taking on lease additional land from other people.† This does happen to some extent in India and we must make an allowance for it in interpreting the statistics relating to the size of holdings and its economic effects. We must further allow for cases of joint cultivation. We are not entitled to assume straightaway, without further enquiry, that every bit of land separately owned is also separately cultivated. Though such an assumption may be generally true, it is not invariably so.

Another phenomenon with which subdivision of land is, in almost every case, associated in India, is that of fragmentation of land. Not only is the size of the holding too small but it is scattered in a number of tiny parcels situated at inconvenient distances one from another.

§ 3. Evils of subdivision and fragmentation :—Let us proceed to enumerate the many evils which flow from excessive subdivision and fragmentation.

The cultivation of an unduly small holding entails waste in a variety of ways. *It does not task to its full strength even such poor equipment as the ordinary cultivator possesses, viz., a pair of bullocks and a plough.* These are sometimes so small that it is scarcely possible to turn the bullocks round while ploughing. The cost of maintaining the bullocks and the cultivator himself remains the same; it does not diminish because the holding is smaller than can be adequately cultivated with the help of the standing equipment. The yield, on the other hand, is bound to be less. More generally speaking, all fixed costs come to bear a larger proportion to the value of the product with every diminution, after a certain point, of the size of the holding. Even as

* Nicholson : *Principles of Political Economy*, Vol. 1 p. 149.

† It should be noted that the economic benefit to the cultivator would obviously be smaller in the case of the leased lands than in the case of land that is owned, because rent is higher than assessment.

regards costs that are very high. Some of them do not vary exactly in proportion to the variation in the size of the holding. For example, the cost per acre of fencing increases with the multiplication in the area enclosed.

When a piece of land is so small that it is not worth while incurring the expense of fencing against stray cattle. And the inability to fence properly fences will impose on all farmers a very heavy burden. No new system of cultivation or of husbandry, would be possible because of the liability of crops to be damaged by cattle straying from the neighbouring fields. Fencing is prohibitive. engaging watchmen would be generally even more so. Such a position of affairs is disastrous in the extreme to the enterprising farmer with ideas.

Another disadvantage attendant on a multiplication of small fields is the waste of area which it involves. A great many acres are wasted in the total area wasted in the process. The smaller the number of fields the greater the saving in the area available for cultivation.

Again, there may be plenty of subsoil water in a field but advantage cannot be taken of this fact, because digging a well would mean wholly disproportionate expenditure considering the extremely small size of the field. It may be worth while sinking a well, if it commands, say, four or five acres of land, but not so, if the land is only about an acre or less.

The employment of labour-saving devices such as tractors, threshers, winnowers etc. is impossible for the small holder unless there is some form of co-operation or union of efforts and resources, which, however, is not easily achieved.

All the disadvantages springing from an unduly small holding are obviously intensified in the holding which in addition to being small, is also badly assembled. Speaking about fragmentation Dr. Mann says, "It has, in fact, all the evils of very small holdings in that it prevents the use of machinery and labour-saving methods; and, on the other hand, of large holdings in that it hinders the

adoption of really intensive cultivation by hand-labour which is the advantage of the small holding.* Difficulties in connection with the up fences, and from the invasion of weeds, and from the lack of protection from stray cattle and from the loss of manure are common to excessive subdivision and

There are, however, several drawbacks peculiar to fragmentation. It involves a greater expenditure of capital and labour and a smaller return than is possible in one compact block. It is calculated that expenditure on irrigation increases by 5·3 per cent for every 500 m. increase in distance for manual labour and ploughing; from 20 per cent to 32 per cent for transport of manure and from 15 per cent to 32 per cent for transport of crops. It is obvious that fragmentation adds to the expenditure in all these ways.

Further, it impedes cultivation, entails great waste of time and waste of labour and makes it impossible to bring the village site to the field. This together with the disputes about boundaries and rights of way is a fruitful source of litigation and endless quarrels among the village folk.

If the cultivator had all his land in one compact block, he would keep his cattle on the farm instead of taking them to the village site, and this would mean a very great saving of manure. As it is, manure has to be carried to the field from the village dung-hill and much of it is wasted as a result.

When land is excessively fragmented, irrigation often becomes impracticable, although sufficient water may be available. Water cannot be supplied so as to reach all the little parcels into which an individual holding may be cut up and besides this there is the difficulty of taking the water by channels which will have to run through other peoples' fields. It is well-known that diffi-

* *Land and Labour in a Deccan Village* (Pimla Soudagar), p. 48.

culties with regard to the channel along which water is to be taken as well as with regard to its distribution lead to much bickering and bad blood.

The combined result of subdivision and fragmentation is sometimes to drive the land entirely out of cultivation. Dr. Mann sums up the evils as follows:—"It destroys enterprise, results in an enormous wastage of labour, leads to a very large loss of land owing to boundaries, makes it impossible to cultivate holdings as intensively as would otherwise be possible and prevents the possibility of introducing outsiders with more money as tenant farmers or as purchasers of good agricultural property."*

§ 4. Case for fragmentation and subdivision:—It must not be supposed that all cases of fragmentation are undesirable. Absence of a holding in one compact block may, indeed, be due to perfectly legitimate economic considerations. The holding of land in different soil areas may be necessary as affording a certain amount of insurance against the vagaries of the seasons. "In many parts of India we find that two or more staple crops are grown in dispersed fields in different soil areas, so that while a deficiency or an irregular distribution of rainfall may destroy one crop, there may be favourable returns from other fields. Indeed, the elaborate system of crop rotation which distinguishes Indian from Western farming has been possible chiefly because the holdings are dispersed."† It is easy to multiply instances of scattered holdings governed by considerations of economic advantage. In the Konkan, for instance, the cultivation of rice lands necessitates the possession of a certain amount of *warkas* land, and therefore, both these must go together. Similarly, above the Ghats, especially on the riverside, it is absolutely necessary for the cultivator to possess at least a small strip of *mah* or alluvial land. It supplies him with fodder for his cattle and is useful in certain other ways. Any scheme of consolidation, therefore, must take these facts into account if it is to be successful.‡

* Dr. Mann, op. cit. p. 154.

† Radhakamal Mukerji's Article on Fractionalisation, Indian Journal of Economics, April 1927.

‡ See Mr. B. V. Jadhav's speech in the Bombay Legislative Council, 10th Oct. 1927.

Similarly, up to a point, subdivision can be defended as leading to a wide-spread distribution of property in land and the creation of a large class of peasant proprietors strongly attached to their land, recognised on all hands as conducive to economic and social stability. This is a consideration which must be borne in mind in framing schemes for the enlargement of the present holdings in India. Large estates and capitalistic farming on the lines of the English model would not be suitable to Indian conditions. Small-scale farming and a strong class of peasant proprietors are the ideals to be aimed at.

When, however, we decry subdivision and fragmentation, we have in mind instances where justifications and extenuating circumstances such as these are altogether absent and the evils have reached an intolerable stage.

§ 5. Extent of the evil in India :—Let us now try to realise the extent of the evil* which is to be found practically in all parts of India. In the thickly populated area of Bihar and Orissa, the tenant holding averages less than half an acre. In Bengal, the cultivated area amounts to scarcely 2·45 acres per worker. The very rights which the cultivator has in his land and which have been secured to him by special tenancy legislation make the cultivator stick like a limpet to his petty holding and prevent him from going in search of work in industrial centres except in the last extremity. In Assam, the size of an average holding is no more than 2·96 acres while in the United Provinces it is only 2·5 acres.† In Punjab, the total cultivated area of the province is about 29·30 million acres which is divided into 10 million holdings, giving an average of less than 3 acres per holding. With reference to Madras the following figures are instructive as bearing on the situation as regards the size of holdings in the village of Ganagikondan :—

* In connection with the evil of fractionalisation, statistics of the acreage per head of population are sometimes given. If we divide the total sown area in British India by the total population we get a quotient of a little over 1·4 acres per head. This indicates the intensity of the pressure of the population on the soil, but is not directly relevant to the problem of subdivision and fragmentation. It shows that too many people depend on land but it is not directly informative as to the extent to which the land is fractionalised.

† See Census Report, 1921, Vol. I, pp. 244-45

* Holdings according to ownership.

* Extent	No. of owners	Extent	No. of owners
Under 1 acre	105	From 20 to 30 acres	50
From 1 to 5 acres	220	From 30 to 40 acres	60
From 5 to 10 acres	250	From 40 to 50 acres	50
From 10 to 20 acres	100	Over 50 acres	90

But this table includes only dry lands and a large area usually lying uncultivated. A better idea of the extent of subdivision can be obtained if only wet lands are taken into account. This is done in the following table:—

* Holdings of wet land.

	Number of owners.	Extent. (acres)
Over 100 acres	..	..
From 50 to 100 acres	1	80
„ 40 to 50 „	..	..
„ 20 to 40 „	3	70
„ 10 to 20 „	5	60
„ 5 to 10 „	40	250
„ 1 to 5 „	210	400
Under one acre	200	120

There are about 350 tenants who cultivate other persons' lands because their own holdings are not sufficiently large. The

* See *Economic Studies*, Vol I, pp 57-58, edited by Gilbert Slater.

following figures give an idea of the state of things prevailing in the Bombay Presidency in the various Divisions :—

		No. of holdings.*	
		1904-5	1921-22
Under and up to 5 acres	N. D.	2,19,519	3,38,129
	C. D.	62,129	3,50,428
	S. D.	1,11,466	2,84,886
Over 5 and up to 25 „	N. D.	1,62,467	1,44,492
	C. D.	2,32,592	1,26,883
	S. D.	1,68,884	2,43,203
Over 25 and up to 100 „	N. D.	28,914	23,651
	C. D.	1,73,775	1,40,546
	S. D.	82,092	61,839
Over 100 and up to 500	N. D.	2,179	2,772
	C. D.	19,148	12,861
	S. D.	8,382	6,815
Over 500 acres	N. D.	129	260†
	C. D.	250	469
	S. D.	326	289

The total number of holdings in all three Divisions in 1921-1922 was 20,37,500. In all Divisions the holdings are increasing in number at a rate faster than the increase in the area occupied. For instance, between 1904-05 and 1921-22 the holdings increased from 12,72,222 to 20,37,500, whereas the area occupied increased from 3,25,91,552 to 3,26,53,443. The increase was particularly noticeable in the lowest class of holdings, viz., 5 acres and below. These statistics although sufficiently disquieting in themselves do not give any idea of the process of fragmentation which goes on

* The accuracy of the comparison between 1904 and 1921 is somewhat affected by a change in the forms of returns.

† The apparent merease in holdings in the class is due to the fact that in the earlier period large holders holding in several villages were treated as small separate holders.

unchecked side by side with subdivision. § Very few even of the smallest holdings are in one block. On an average, there are about three to four plots per holding for the Presidency proper.

Dr. Mann illustrates the process of subdivision and fragmentation by the following tables in connection with his study of Pimla Soudagar, a village in the Poona District (1917).

Number of holders with more than 40 acres	..	1
" " 30 to 40	..	1
" " 20 to 30	.	9
" " 10 to 20		18
" " 5 to 10	.	34
" " 1 to 5		71
Less than 1 acre		22

Total holdings 156

These 156 holdings were distributed into separate plots as follows:—

Number of plots	Number of holders	Number of plots	Number of holders
1	28	10	3
2	31	11	5
3	13	12	3
4	19	14	1
5	19	16	1
6	13	18	1
7	8	19	1
8	5	20	1
9	4		

Thus 156 owners have between them no less than 729 plots of which 463 are less than one acre; 211 less than $\frac{1}{4}$ th of an acre. In 1771, the average size of the holding appears to have been as

§ Bombay Council Debates on Small Holdings Bill, Sir Chuni Lal Mehta's speech 8th Oct. (1927).

much as 40 acres; in 1818, it had come down to $17\frac{1}{2}$ acres; from 1820 it remained stable at 14 acres and by 1915 it was reduced to 7 acres." It is evident," says Dr. Mann, "that in the last sixty or seventy years the character of the land holdings has altogether changed. In the pre-British days and the early days of British rule, the holdings were usually of a fair size most frequently more than 9 or 10 acres, while individual holdings of less than two acres were hardly known. Now the number of holdings is more than double and 81 per cent of these holdings are under 10 acres in size while no less than 60 per cent are less than 5 acres."† In the Konkan, subdivision and fragmentation are especially marked and generally recognised to be a very serious evil. "The average holding of rice land in the Konkan is only two or three acres and a single field of an acre in area will be often divided up into eight or nine separately owned plots." In Gujarat and West Deccan a similar state of affairs is to be found though the evil is somewhat less serious, especially in the West Deccan.§

§ 6. Causes of subdivision and fragmentation :— Various causes have been put forward to account for the evil of excessive subdivision and fragmentation. One of these is the growth of the spirit of individualism which is responsible for the break-up of the Joint Family system. Joint cultivation is no longer so common as it used to be. The insistence on partition by metes and bounds and separate cultivation are much more frequent than in the old days. This spirit of individualism was further assisted by the emphasis, which English judges administering law in India placed on private property and individual rights. Again, there are those who consider that the Hindu and Mahomedan Laws of Inheritance and Succession and the customs associated with them are the causa causans of subdivision and fragmentation. It is easy to see how the size of the family holding would diminish with every division of the ancestral property. Subdivision, however, is also normally accompanied by fragmentation because each sharer insists on obtaining a fractional share

† Dr. Mann, op. cit p. 46.

§ Keatinge : *Agricultural Progress in Western India*, p. 70-71

of each kind of land in every plot instead of being satisfied with one compact block. The aim in such a system of partition is to ensure *perfect equality of the shares*. The same idea underlay the open field system in Mediaeval Europe under which strips were intermixed and scattered in order to divide equitably, good and bad, the well and the ill-situated fields. But in India, this apparently equitable mode of division is carried to an extreme and is often vitiated by motives not of equalising advantages but those rooted in *jealousy and suspicion*.*

As against the theory that the Laws of Inheritance and Succession are primarily responsible for the extreme fractionalisation and morcellement of land in India, it has been argued that these Laws have been in existence for hundreds of years, but the evil which they are supposed to have caused is comparatively modern.† It must, however, be admitted that in the absence of these Laws the evils we are discussing would not have manifested themselves on the present scale. The Laws permit any one of the co-sharers to separate out his share if he chooses to do so. *The desire to seek partition may be due to other causes but, given the will, the Laws showed the way.* We have already referred to the growth of the individualistic spirit as one of the causes why the tendency to insist on a partition is stronger today than it used to be. But this tendency finds actual expression through the Laws of Inheritance and Succession. *Instead of saying that these Laws are the causes of subdivision and fragmentation, it would perhaps be more accurate to call them the instruments or the means by which continuous subdivision is effected.* There is no compulsion to make use of the means, but it lies ready to hand whenever it

* "What are the reasons for the increase of fragmentation, generation after generation, even without any material increase of the population? The reason is chiefly the terrible jealousy...among the brothers in almost every agricultural family. Each one will abate no chance to take advantage of the others. They will go so far as to fight over the partition of honey on the branch of a tree: they have even been known to fight over the partition of the shade of a tree, not its fruits nor its branches." Bombay Council Debates on the Small Holdings Bill, 10th Oct. 1927, F. G. H. Anderson's speech.

† Wadia and Joshi, op. cit., p 241

I. E. ...31

is desired to put it into operation. It is true that in the old days it was not so frequently requisitioned as at present, but it is not true to say that the operation of these Laws " in the past did not lead to subdivision of holdings ".* We must rather say that their operation was rarely allowed, the joint family being the rule: whenever it was allowed, it inevitably led to subdivision.

Increase of population since the establishment of British rule is advanced as another cause. Increase of population would mean an increase in the number of heirs. But this in itself would not cause subdivision, unless there were other causes impelling the heirs to seek an out-and-out partition and break the Joint Family tradition in the way that was not common in the old days. So long as there was a good deal of unoccupied land, this enabled the additional numbers to be provided for without subdividing land already occupied. But when practically all the land that could be easily brought under the plough was occupied, the position became different and *the only escape from subdivision was in joint cultivation which, as we have already hinted, became less and less common.*†

The decline of the handicrafts due to the competition of machine-made goods is also regarded as one of the major causes. It is worth while, in order to clear our ideas on the subject, trying to understand the precise *modus operandi* of this alleged cause.

As we have seen, the artisans attached to the village usually possessed some land in the village. Those of them whose position steadily deteriorated owing to the competition of machine-made goods fell back on their land as the only resource. The family holding having become the sole means of support, its importance rose in the eyes of those who had a claim on it. The system of sharing the product of joint cultivation among the co-parceners according to the need of each probably began to appear unfair to those whose needs were smaller and who, there-

* Wadia and Joshi op. cit 244.

† The dissolution of the Joint Family according to Mr. Anderson has become especially marked since 1886, owing to the operation of the Income Tax Act. (See Bombay Debates on the Small Holdings Bill.)

fore, absorbed a smaller share of the total product. The feeling of jealousy engendered in this manner possibly militated against the maintenance of the plan of common cultivation, and subdivision resulted. The land that may have been affected in this manner, however, obviously must have been negligible in amount.

As regards the artisans in the towns, they did not as a rule possess any land. When, owing to competition of machine-made goods, they lost their vocation, they became landless labourers. This may be looked upon as a cause of the increase of pressure on land but could not have had any direct influence on the division of the land. It is possible that some of the urban artisans migrated to the villages and bought or occupied a small piece of land which was uneconomic from the very beginning or became so in due course owing to the operation of the Law of Inheritance. It is, however, improbable that the artisans, who were driven to the land because their original occupation had ceased to be remunerative, should have ordinarily commanded sufficient savings or credit to enable them to purchase land. In any case, unless the land so acquired was a slice out of an originally larger piece of land, the position so far as subdivision was concerned would remain the same as before. If, on the other hand, new land was occupied, this would add to the original number of holdings; it would not accentuate the subdivision of holdings that already existed. *On the whole, therefore, we may hazard the statement that while the decline of the handicrafts resulted for the most part in an increase of landless labourers and was the cause of much suffering and distress, its influence in the direction of increasing subdivision and fragmentation was negligible.*

It is possible, however, to establish a causal connection between the failure of industry to expand in proportion to the increase of population on the one hand, and extreme subdivision and fragmentation of land on the other. If the increase of population in recent times had been accompanied by a commensurate development of manufacturing industries, the superfluous population on the land would have been absorbed by it. If a family became too numerous to be maintained comfortably on its holding, some of the members would have moved to the industrial centres leaving the

rest to cultivate the family holding and enjoy the fruits of their labour. The legal right on the family land of those who left the village would remain, but if the employment in industries gave them the means of a decent existence, there would be a readiness on their part to forego their claims on the income from the family land in favour of those who remained on it. Unfortunately, such a development failed to take place; population increased and the increase instead of flowing into industries flooded back on the land, and owing to the loosening of the bonds of the Joint Family and the development of separatist tendencies, resort to the Law of Inheritance became more and more the rule. Thus, paradoxically enough, with the increase in the pressure of economic disability people adopted a course of action which resulted in adding to instead of lessening their embarrassment. Land was now the only resource. One would have thought that there was all the more reason, therefore, to make the most profitable use of it. But instead of treating it with the utmost care and consideration, it was cut up and mutilated in a most reckless and suicidal manner.

To sum up, then, we may say that increase in population, lack of a corresponding expansion of industry, the dissolution of the Joint Family and the growth of the individualistic spirit—all these assisted by the Laws of Inheritance and Succession must be regarded as the main causes of excessive subdivision and fragmentation of holdings.

When the evil reaches an intolerable stage certain automatic remedies may come into effect. For instance, the excessively small holding may be either sold or let out by the owner. But such instances are not sufficiently common and do not affect the main problem to any appreciable extent. We must, therefore, recognise its existence in a serious form as established and proceed to discuss the possible remedies.

§ 7. The problem in foreign countries:—The problem is by no means peculiar to India. Other countries have also had to face it and they have done so in a variety of ways. The experience of countries like France, Switzerland, Belgium, Germany, Denmark and Japan has proved that voluntary agreements among

the peasant-proprietors are not equal to the task of securing compact and reasonably-sized holdings and that, therefore, remedial legislation is necessary. Such legislation has been adopted in most of the countries concerned and has involved the following principles:—(i) Compulsory expropriation of existing holders; (ii) compulsory reconstitution of holdings at the instance of a certain fraction of landholders or in some cases without it; (iii) subsequent indivisibility of reconstituted holdings; (iv) exemption of the holding from seizure for debts and (v) not allowing the reconstituted holding to be combined with other holdings.

§ 8. What is an economic holding? :—In India, attempts have been made in recent times to tackle the problem both on a voluntary basis as well as by the method of legal compulsion. Whatever the basis adopted, one of the questions that has always to be faced is the meaning of the term 'economic holding.' Several definitions of what constitutes an economic holding have been suggested. *Mr. Keatinge* understands by an economic holding, "A holding which allows a man a chance of producing sufficient to support himself and his family in reasonable comfort after paying his necessary expenses," and he goes on to remark that, "in the Deccan, an ideal economic holding would consist of (say) 40 or 50 acres of fair land in one block with at least one good irrigation well, and a house situated on the holding. The desirable area would vary greatly in different parts according to circumstances. A gardener in the Surat district with three acres of good garden land can support a family in comfort, while in the dry part of the Deccan with poor soil 30 acres might not suffice. Between the ideal economic holding and the obviously uneconomic holding there are many gradations; but it would not be difficult to fix a standard for any tract."[†] *Dr. Mann* defines an economic holding as "one which will provide an average family at the minimum standard of life considered satisfactory"[‡] *Prof. Stanley Jevons* with reference to conditions in the U. P. deside-

* *Keatinge* : op. cit p 72-73.

† *Rural Economy in the Bombay Deccan*, pp. 52-53.

‡ See *Land and Labour in a Deccan Village*, Study No. 2, p. 43.

rates a size of about 30 acres for a model holding. His objective is to ensure to the farmer not only a 'reasonable,' much less only a 'minimum' standard, but a 'high standard' of living.

Before we pursue the question further, we might as well point out, what is indeed fairly obvious, that the definition of an economic holding will vary according to a number of factors; for instance, whether we are thinking of gross returns or net returns, whether the capital available is ample or strictly limited &c. It would further depend on the nature of the methods of agricultural production, on whether cultivation is extensive or intensive, on the quality of the soil, on the presence or absence of irrigation facilities, on the crops raised and so on.

This being understood, let us try to attach a precise connotation to the term economic holding. *Taking the case of an average family, we might say that the amount of land which would give the most profitable employment to the capital and labour that it commands would be the ideal holding.* All kinds of factors will have to be weighed, not excluding the possibility of employing the available capital and labour or a part of it in alternative employments other than agriculture, the distribution of the capital and labour between agriculture and other occupations being determined on the principle of equi-marginal returns. The object aimed at here would be the highest possible net return to every unit of capital and labour engaged in agriculture.

But some of assumptions ordinarily made cannot be realised under the actual conditions in India, especially, the assumption that labour is perfectly mobile as between agriculture and other occupations either within or without the village is not valid owing to the absence of rural industries and the inadequate development of manufacturing industry in urban areas. So far as Indian conditions are concerned, we have to assume that the labour which an average cultivator's family commands is practically not transferable to other activities than agriculture and that it is unconditionally available for agriculture alone.

The idea of an economic holding will perhaps be more easily grasped, if we take a numerical example.

Let us take an average family consisting of five members and, as our unit of labour, the labour that such a family can supply.* Similarly, let us define as our minimum unit of capital, a pair of bullocks and a plough. These assumptions square well with prevalent conditions in India. Let us now suppose that this family possesses a holding of 5 acres on which a gross income of Rs. 150 can be obtained with the available labour and capital. Deduct from this the cost of maintaining the pair of bullocks, say, Rs. 40, and other costs amounting to, say, Rs. 20. This leaves the family with a net income of Rs. $150 - 60 = \text{Rs. } 90$.† Let us assume that a plough and a pair of bullocks together with the labour supplied by our average family can satisfactorily cultivate 20 acres. If, therefore, the family possesses a holding of 20 instead of 5 acres the result will be as follows:—Gross yield = Rs. 600, cost of maintaining the pair of bullocks = Rs. 40 as before, other costs = say, Rs. 80, i. e. four times as much as before, (though the likelihood is that the increase in the other costs will be less than exactly proportionate to the increase in the acreage). This leaves us with a net income of Rs. $600 - 120 = 480$.

Let us assume that there are four such families A, B, C, D, each possessing 5 acres of land and each cultivating its holding separately. Each spends Rs. 60 (Rs. 40 for bullocks and Rs. 20 for other expenses) and gets Rs. 150 gross income and Rs. 90 net income.

Supposing they agree to cultivate jointly the whole area of 20 acres, which they own between them, they will then be able to dispense with three pairs of bullocks and will save Rs. 120 in the aggregate on that account. Assuming the same labour, i. e. the labour of only one family, is applied as before, the result will now be Rs. 600 gross income; out of which we deduct Rs. 40 for the bullocks and Rs. 80 for other expenses, which gives a net income of Rs. 480, and the share of each family is Rs. 120

* " The unit of economic life in India is the family and not the individual. " Jack : *Economic life of a Bengal District*, p. 8.

† These figures are, of course, purely illustrative, but the substitution of any other figures will not affect the argument in any way.

instead of Rs. 90 when each cultivated its holding of 5 acres separately. Every family thus increases its income, although labour employed in the aggregate is now only one-fourth of what it was before, because according to our hypothesis 20 acres are required to occupy fully the labour supplied by one family.

The question, however, arises what is to be done with the extra labour that is available? It cannot find alternative employment in other occupations, because *ex hypothesi* there are none such. The choice is between agricultural work or no work. Under these circumstances, some of the extra labour may as well be employed on the land, so long as it results in *some* increase of the product, though the increase may not be proportionate to the addition of the labour units. Let us suppose that the employment of the surplus labour increases the gross yield by Rs. 200. The position now is :—(gross income = Rs. 800)—(Expenses = Rs. 120) = Rs. 680 net income.

Let us now exhibit these cases in their order of merit —

Case I:—1L + 1C + 20 acres; net income Rs. 480; income per head of the family = $\frac{480}{5}$ = Rs. 96

Case II:—4 L + 1C + 20 acres; net income = Rs. 680; income per head = Rs. $\frac{680}{20}$ = Rs. 34

Case III:—4 L + 4 C + 20 acres: net income = Rs. 360; income per head = $\frac{360}{20}$ Rs. = Rs. 18.

L stands for one unit of labour (i. e. one average family)

C stands for one unit of capital (i. e. a plough and a pair of bullocks).

The best result is thus reached if a holding of 20 acres is combined with one unit of labour and one unit of capital. This is our economic holding. Any arrangement by which the ratios between land, labour and capital differ from those in the ideal holding thus defined will result in uneconomic holdings and reduce the income per head of the producers. The uneconomic holdings will be more and more economic in the measure in which the ratios are altered in the direction of the proportions in the ideal holding. Case I gives the best results from the point of view of the producers, provided the surplus labour of three

families can be turned to some remunerative occupation other than agriculture. But if conditions are such that all the families depend exclusively on the 20 acres of land, Case II gives the best arrangement under the circumstances; because in case I, the total net income available for the four families is Rs. 480, whereas it is Rs. 680 in Case II. Nevertheless, this does not alter the fact that case I gives the ideal proportions between land, labour and capital; so that, given 4 L, the best combination would have been 4 L + 4 C + 80 acres. But as we have only 20 acres available, we have to adopt the next best arrangement as in case II, which incidentally brings out the fact that joint cultivation, to some extent, remedies the evil of excessive pressure on land.

It will be noticed that this method of envisaging the problem of defining an economic holding is less open to objection than that implied in some of the current definitions which we have given above. The expressions 'reasonable comfort,' 'minimum standard' as well as a 'high standard' are all vague and ambiguous. If, on the other hand, we say that the end to be achieved is *so to arrange the relation between land, labour and capital that it will lead to the greatest possible advantage to the producers*, we get out of this difficulty. The greatest economic advantage, may enable the cultivator to maintain a very high standard of life or may fall short of what is deemed to be required even for a minimum standard. For example, the income per head of Rs. 96 in Case I above is not, it may be contended, enough for a proper standard of comfort. But all the same, it is the highest attainable. It is possible that in spite of the best combination that we are able to achieve between land, labour and capital, the result may not be wholly satisfactory. For this other remedies must be adopted such as more efficient methods of production, better marketing facilities etc. The creation of an economic holding is merely intended to ameliorate the ryot's position only in so far as it can be ameliorated by one particular method, viz., by putting him in possession of a reasonably-sized holding; it does not promise to create a new heaven and a new earth for him.*

* There are some people, however, who hold that the evil of excessively small holdings is imaginary, and that the holdings are uneconomic not in

§ 9. Remedial measures:—Let us now proceed to notice the remedial measures hitherto adopted or proposed for coping with the evil of subdivision and fragmentation in India. Under the auspices of the Co-operative Department and under the inspiring leadership of Mr. Calvert, interesting experiments in *consolidation of scattered holdings by the formation of Co-operative Societies* have been made in the Punjab. Sixty thousand acres have been thus redistributed during the last five years. The effect of consolidation of holdings, so far as it has been achieved, has been wholly beneficial. Land has become more productive; areas formerly uncultivated owing to excessive fragmentation have been brought under the plough; litigation and quarrels have decreased and a keener desire for improvement is in evidence. The province of the Punjab, however, is in some respects exceptionally well suited to such co-operative activity resulting in consolidation on a voluntary basis. For one thing, its villages are more homogenous as regards land as well as population. Secondly, lands in the canal colonies being newly brought under cultivation, consolidation is more easy to effect in their case. *Even under the best of conditions, however, the pace of the movement for consolidation is bound to be very slow, and further, there is no guarantee that in the future the work of consolidation would not*

the sense that they are too small but in the sense that they are too big for the cultivator to look after adequately. The capital he commands and his general equipment are so poor that enlarging his holding would be to increase his difficulties. If this is so, the obvious remedy would be to suggest measures for reducing the size of the average holding still further, but it has not occurred to any one yet to recommend this. The fact is that the present inadequacy of equipment and the poverty it connotes are themselves partly the effects of excessively small holdings. Enlarging them is to improve their productive value, though, side by side with this urgently needed reform, every possible remedy must be adopted to remove the disability imposed by the inadequacy of the capital available to the ordinary cultivator.

§ "The village of Taharpore is a striking example of what the consolidation of holdings has achieved and can achieve. This village comprising 3,477 kanals (a kanal is $\frac{1}{8}$ of an acre) has been consolidated. Its area which was formerly divided into 1,435 fields and 844 plots has been consolidated into 63 plots. The average area per plot, previously 4 kanals, is now 55 kanals." India in 1925-26, p. 154.

be undone. The Punjab officials themselves such as Mr. Calvert, Mr. Darling and Mr. Strickland have admitted before the Royal Commission on Agriculture that the compelling force of legislation is necessary to save the peasantry from the baneful effects of excessive fragmentation of holdings. *Permissive legislation has been tried in India and found wanting.* Baroda introduced such legislation a few years ago, but as Sir Manubhai Metha in his Presidential Address before the Bombay Provincial Co-operative Conference (1926), admitted, the law has remained a dead letter on the statute book. The plan of voluntary action, as Mr. Keatinge tells us, has failed even in the advanced countries of the West, which have been obliged to introduce compulsory legislation to eradicate the evil of fractionalisation.

Mere refusal on the part of Government to recognise uneconomic holdings is not enough as is seen by the experience of Bombay. The framers of the Joint Report, on which the Bombay Rayatwari system is based, apprehended the evil of subdivision and were responsible for the inclusion in the Land Revenue Code, of Section 98, according to which no survey member was to be of less extent than certain minima fixed from time to time for several classes of land. But this provision was ineffective in preventing the partition of land beyond the minima prescribed and the holding of them as separate plots. The Law Courts freely recognised such divisions and, therefore, Section 98 had to be repealed and now the Record of Rights recognises the minutest subdivision.

In November 1916, Mr. Keatinge, then the Director of Agriculture, Bombay, submitted a draft bill enabling such landholders as wished to do so, to institute permanent economic holdings not subject to future partition on any account and to enable the executive Government to secure the same results in respect of unoccupied Government land. The bill, however, had to be shelved being adversely criticised by several revenue and judicial officers to whom it was sent for opinion.

§ 10. The Bombay Small Holdings Bill of 1927:—While most Provincial Governments have hitherto fought shy of introducing legislation to supply a corrective to the tendency of endlessly

dividing the land, Bombay has given the lead to other Provinces by introducing, in October 1927, a Small Holdings Bill in the Legislative Council under the sponsorship of the Hon. Sir Chunilal Mehta. The object of the bill is to prevent further subdivision and fragmentation of holdings beyond a limit prescribed. The Bill is divided into two parts. Part I aims at preventing the further fragmentation of holdings. A District Committee, consisting of the Collector (as the Chairman), the Deputy Director of Agriculture and three approved members selected by the District Local Board, is to lay down for the district or parts of the district, according to local conditions, a standard unit, being the minimum extent that can be cultivated profitably as a separate plot. All existing plots of land below the standard unit are to be declared as fragments. No such fragment can be sold, exchanged or mortgaged with possession, leased or otherwise transferred so as to cause further fragmentation, *although there is nothing to prevent the holder of it from cultivating it*. Alienation of fragments cannot be permitted unless it leads to consolidation. The right of pre-emption is recognised. No fragment is to be leased to any person other than the occupant or the lessee of a contiguous plot. In the case of new fragments which come into existence after the standard unit has been determined, all transfers of land must necessarily be in favour of neighbouring owners and lessees of land. The law of equal inheritance is not directly modified. It has, however, been laid down that, while no one will be prevented from coming into possession of a new fragment, it shall not be cultivated unless it is combined with a contiguous plot or plots so that the total area so cultivated shall be equal to or exceed the standard unit.

Part II aims at consolidation of existing fragments for purposes of more profitable cultivation. It provides for the preparation of a scheme on the application of the collector for any village or area, provided not less than two-thirds of the holders of plots and owners of not less than one-half of the land affected consent to the making of the scheme. The scheme is to be administered through a special consolidation officer who will be helped by three representatives of the village concerned. He

will consider all the rights affected and effect their valuation. All disputes regarding the apportionment of land will be settled finally by an arbitration tribunal consisting of the District Judge (president) and two assessors. The redistribution scheme shall provide for roads, tanks, rights of way, water-courses etc. Certain Government concessions such as exemption from stamp and registration fees, remission of half the land assessment for a period of three years, grant of tagavi, are offered for encouraging such consolidation schemes.*

§ 11. Controversy regarding the Bill:—The Bill, as will be clearly recognised, involves a certain amount of compulsion. *It has been objected that voluntary action and persuasion are to be preferred to compulsion by legislation. But we have already dealt with this point and seen that voluntary action cannot be relied upon for remedying the evil.* It is easy for men to realise that a plough should not be divided but that its use might be; similarly, that it is no use trying to divide a cow, the most sensible plan being to divide its milk. But men left to themselves act, in the case of land, as if they did not realise that, like a jewel, it loses its value by subdivision beyond a certain point, and as Professor Stanley Jevons remarks, "It is a peculiar and most important sociological fact that the laws and customs regulating ownership and use of land have a stronger tendency to persist than any other characteristic of society and, therefore, difficult to alter by any other extraneous action than the *force majeure* of the law"§

* All the land will be rearranged so that each holder will have (1) about the same area and kind and quality (especially in regard to rights of irrigation water) of land of each kind (dry, rice or garden) as before; (2) in much the same position as before (taking his biggest parcel as a sort of pivot for consolidating his block; (3) if there are trifling differences of quality, then those who get an advantage shall pay those who lose and Government will lend the cash; (for this purpose every yard of land is carefully valued in its original state); (4) if there is any holder with so little land that when all is put together it is still incapable of being cultivated profitably (this limit being fixed by consultation and sound agricultural advice), then he cannot go on cultivating it but must sell or lease it for inclusion in some other holding; (5) any debt secured on any land shall be paid or go with it. See F. G. H. Anderson's Pamphlet on the Bombay Small Holding Bill.

§ Quoted by Sir Chunilal Mehta, Bombay Council Debates Oct. 1927.

Another criticism is that the bill contravenes the existing Law of Inheritance and the principles on which Indian family life is based. As against this it may be urged that the interference with the Law of Inheritance cannot be called radical because the bill allows separation of interests although not actual physical subdivision of landed property after a certain point. In any case, the law is after all man-made and if it is seen to be mischievous in its tendency the only sensible thing to do is to alter it.

One of the criticisms against the Bill, which is most frequently heard is that its operation will involve extensive expropriation and the creation of a large landless proletariat. This is based on the assumption that the standard holding will be fixed at a figure very much higher than the present average holding of a cultivator. The Bill contemplates the creation of "profitable holdings," and not "economic holdings". In the words of Sir Chunilal Mehta, "Standard unit has been defined as the minimum necessary for profitable cultivation and not for an economic holding which will support the cultivator and his family". It is intended "to prevent agriculture from being unprofitable, which is the least that can be done". The implication here is that the profitable holding contemplated will be very much lower than the economic holding as we have defined it, the idea of creating economic holdings apparently being abandoned on the ground that it will necessitate too drastic a change from present conditions and involve almost a social revolution. A profitable holding would be that which will enable the holder to live, not indeed as well as a truly economic holding would, but somewhat better than at present. After meeting the expenses of cultivation (the cost of the labour of the cultivator and his family being excluded from the calculation), how much should be left over for the cultivator in order that we might be able to call the holding just profitable? The determination of this is purely arbitrary from a scientific point of view and the question can only be settled on commonsense lines. It seems likely that where an economic holding would mean say, 20 acres, the standard unit will be fixed at something like 3 or 4 acres. This being so, a very small number of people will actually have to part with their lands as a result of this particular piece of legislation.

Also, assuming the standard holding is to be fixed at a very moderate figure, many of those who will have to part with the land under the new law by way of lease or sale are likely to be people, whose holdings are so small that they cannot possibly live by them alone and who, therefore, are not whole-time agriculturists. The little fields they possess are a source of loss in so far as they prevent proper attention being devoted to the supplementary occupation. *The holder, under these circumstances, would be better off if he sublets or sells his land*, and it will be all to the good if, in this manner, "a certain number of indifferent, half-skilled and very much under-employed agriculturists, who get a very small out-turn from badly cultivated land and who for a large portion of the year are equally half-skilled, indifferent and under-employed industrial workers, are turned into a definite class, on the one hand, of skilled and fully employed agriculturists, and on the other, fully occupied and fully productive industrial workers or labourers." "The bill will not turn ryots into labourers and owners into tenants but it will turn a small number of starving ryots into ryots who can live on their holdings. It will turn another set of men who are partly cultivators and partly labourers into full-time cultivators with enough land to live on. And it will turn a still smaller number of men who are now starving as part-time labourers and part-time cultivators into full-time labourers with a decent living and also enjoying some profit from the land they still own and lease out to their neighbours, but do not waste time and incur loss by cultivating in person."¶

The critics of the bill often lose sight of the probability that it will act as a deterrent to reckless subdivision and thus the question of expropriation will not arise in many cases. People will to some extent be stopped from seeking partition if, as a result of the partition, the family holding will be divided into fragments below the minima fixed, to which certain legal disabilities are proposed to be attached. Attempts also will be more common to cultivate the holdings jointly even after partition, the product being divided, though not the land, among the co-sharers.

¶ F. G. H. Anderson's Pamphlet on the Bombay Small Holdings Bill.

It would be losing all sense of proportion if we were to examine in detail all the objections raised against the bill. Besides, anything like a final judgment is impossible at the present stage, because much will depend on a number of details which have not yet been settled. The Select Committee to which the Bill has been referred has yet to finish its task and we have nothing except the general principles to enable us to form a final judgment on the Bill. We can only say that the greatest care will have to be taken in order that the personnel of the District Committees should be such as to command public confidence; also the delicate task of fixing the standard unit should be performed with the greatest caution and circumspection after fully reckoning with important relevant facts, such as differences in rainfall, quality of the soil etc. Similarly, every safeguard needs to be provided in order that the clause about the right of pre-emption etc. should not work unfairly for the owner of a fragment under the definition of the Bill.*

To some the Bill may seem inadequate and not to go sufficiently far. This objection has been raised especially against the provisions for consolidation. This part of the Bill, it is said, requiring, as it does, the consent of a large number of holders, before it can come into operation, will remain a dead letter, and Sir Chunilal has himself admitted that it will have to be supplemented by a vigorous anti-fractionalisation propaganda. However, although the Bill may not reduce the evil against which it is directed to any considerable extent in a short time, it may at least be expected to work as a *valuable educative agency* and to be able to create a proper state of public opinion and sentiment so as to allow of a still bolder measure being introduced in the future not only in Bombay but in the other provinces as well.

* The Bill requires that in the letting, selling or mortgaging of a fragment the neighbour must have the first offer if he pays the rent or the price genuinely offered by another, or in the absence of such an offer the collector is to decide whether the neighbour's offer is fair and if in his judgment it is not fair the fragment may be given to another person. Greater confidence would be inspired if an appeal to a competent judicial tribunal is allowed from the decision of the collector.

We have implicitly admitted above that any legislative measure, however modest but designed to put an end to the present excessive subdivision and fragmentation of holdings, will lead to a certain amount of dispossession, and although we have held that the lot of those who are thus compelled to part with their land will generally be better than before for reasons already given, as well as because larger holdings will mean more prosperous agriculture and greater employment for labour, it would nevertheless be advisable to take special measures in order that the dispossessed holders should be rapidly and comfortably absorbed in profitable employment. For this reason, if for no other, improved agriculture should be promoted; colonisation schemes, wherever practicable, should be started; rural industries as closely associated with agriculture as possible should be developed; and the pace of industrial development should be quickened. Before concluding we may as well repeat that economic holdings by themselves will not solve the problem of the impoverishment and the economic disablement of the ryot. They are advocated only as one of the necessary conditions of a thriving agriculture. The urgency of pushing ahead with other schemes of economic amelioration indicated above will remain as great as ever even after the creation of proper economic holdings.

II Permanent Improvements.

§ 12 Absence of permanent improvements and its consequences:—One of the most striking contrasts between Western and Indian farming is that in India there is *an almost entire absence of permanent improvements on the land*. Speaking about conditions in the Bombay Deccan, which hold good, more or less, of other parts of India as well, Mr. Keatinge observes, "In the western portion some careful and laborious terracing has been done on the hill-sides by the smaller owners. Here and there a favoured tract will be supplied with irrigation wells, and some farm buildings may be seen in the fields; but over the greater portion the landscape owes nothing to the hand of man—the fields lie unwatered, unfenced and unembanked, without shelter for man or beast." * *The absence of proper fencing puts the crop at the*

* *Rural Economy in the Bombay Deccan*, p 107.

mercy of wild boars, stray cattle and poachers, not to speak of the numerous boundary disputes to which it gives rise and the labour it involves in connection with herding cattle and watching crops. The freely blowing winds cause not a little damage to crops like cotton in the absence of wind-breaks. Although efforts on an individual as well as a co-operative basis to provide proper fencing have been made, much work yet remains to be done in this connection. *Field embankments are further conspicuous by their absence.* The consequence is soil erosion and scouring of the land leading to much preventible loss to the agriculturist. *The soil, again, is very rarely properly graded and levelled so as to secure uniform absorption of water. Nor is there any satisfactory system of drainage.* This leads to water-logging, and if at all an outlet for the excess of water is provided, it is allowed to run over other peoples' land and damage it. In this manner, for instance, "thousands of acres of valuable land on the left bank of the Jumna have been damaged by the formation of a network of ravines; and villages which were at one time surrounded by fertile fields now lie in a network of useless gullies."[†]

The provision of field embankments on the required scale as well as efficient fencing arrangements are normally speaking beyond the capacity of the individual cultivator and the problem requires resort to joint schemes of land improvements for its solution. It is also essential that Government should lend a helping hand by a freer grant of Takkavi loans and by making available technical guidance through the appointment of special trained assistants to help such activity. *The absence of farm buildings* is another serious defect because it makes supervision difficult and entails an unnecessary waste of time and labour for both men and cattle. Cattle cannot be properly housed and the necessity of housing them along with men in the houses on the village site is highly unsatisfactory. The loss of manure in the process of carrying it from the village site to the fields must be something immense. There are, however, difficulties in connection with the

[†] See Dr. Clouston's Memorandum submitted to the Agr. Comm., p. 12.

provision of suitable farm buildings which it will take time to surmount. One difficulty is that living in a farm house on his holding would deprive the cultivator of the protection and security which he at present enjoys by living along with the other cultivators on the village site. The need for mutual security was very much greater before the establishment of Pax Britannica but even now it is an important consideration; secondly, the attachment to the ancestral village dwelling comes in the way of the villager transplanting himself to a new house on the farm; thirdly, the expense in connection with the change of residence would be a consideration; fourthly, the average holding is normally so scattered that the cultivator has not one but several farms; and lastly, whereas by living on the village site the cultivator can take advantage of the public wells for obtaining water for drinking purposes, he would have to dig a private well of his own, if he shifts to a farm house on his holding. All these difficulties, however, must be got over having regard to the great benefit to be derived from each cultivator staying on his holding.

§ 13. III Irrigation.

The following are the main questions to be discussed with reference to irrigation in India:—(i) Its necessity and importance. (ii) Advantages of irrigation. (iii) Classification of irrigation works with special reference to Government irrigation works. (iv) Extent, growth and revenue. (v) The irrigation policy of Government. (vi) Irrigation versus Railways. (vii) Future prospects.

(i) Necessity and importance* :—The importance of irrigation facilities in an agricultural country like India can hardly be exaggerated and, as the numerous indigenous irrigation works in the shape of wells, tanks and canals show, has always been recognised by the people and the state even in pre-British times. There are many reasons why our agriculture cannot afford to depend exclusively on rainfall and why it is necessary to provide the agriculturist with suitable irrigation facilities. In the first place, there are many parts like Sind, Rajputana and South-West Punjab which are practically rainless so that

* See Triennial Review of Irrigation 1921-24; also Harris: *Irrigation in India*, pp. 1-4.

cultivation is impossible except by artificial irrigation. Secondly, where the rainfall is not so very deficient, it is precarious and ill-distributed as in the uplands of the Deccan which is exposed to chronic drought. Thirdly, some crops like rice and sugar-cane require a regularity and sufficiency of water, which is not supplied by the rainfall except in the most favoured regions. Fourthly, the intensive cultivation of land under the pressure of an increasing population has made second or winter crops necessary and these require artificial irrigation in the absence of the winter rains. Fifthly and lastly, there is the general consideration that nearly 80% of the population are dependent upon agriculture and their well-being must necessarily be affected by the adequacy or otherwise of such an important requisite as irrigation. It is for this reason that irrigation has been practised in India from times immemorial, especially in the forms of wells and tanks, and the true British contribution to the irrigation system consists in the large irrigation works constructed for the purpose of utilising the surplus water of large rivers.

(ii) **Advantages of Irrigation:**—The advantages of irrigation are numerous, the principal ones being an increase in the yield of crops, the successful introduction of a stable agriculture in arid and precarious tracts, protection from and insurance against famines and scarcity, larger railway profits in agricultural provinces like the Punjab and direct financial gain to the state.

(iii) **Classification of Irrigation Works:** (*A*) *General classification:*—There are three main kinds of irrigation works in India, (1) Wells, (2) Tanks and (3) Canals. The canals are again of three types. viz., (*a*) Inundation Canals. (*b*) Perennial Canals, and (*c*) Storage Works. We may now describe these different classes of irrigation works.

(1) *Wells*—Well-irrigation is and will always be a vital factor in Indian irrigation, about 25% of the irrigated area being accounted for by wells. There are about two and a half million wells in various parts of the country irrigating about 13½ million acres of land (including Indian states) and representing a capital outlay of about 100 crores of rupees. This form of

irrigation possesses a high degree of utility and is more efficient than canal irrigation.* Wells are mostly private works, though their construction is encouraged by Government, who advance Takkavi loans for the purpose and exempt the improved land from any extra assesment. The utility of wells has been considerably increased by the subartesian bores and the installation of small power-pumps of a standardised pattern. These improvements are especially promoted by the engineering section of the Agricultural Department.

(2) *Tanks*—Tanks have formed characteristic features of Indian agricultural economy since very early times. They are, however, practically unknown in the Punjab and Sind. They are most highly developed in Madras where there are about 40,000 of these petty irrigation works serving between $2\frac{1}{2}$ to 3 million acres. Many old village tanks have, however, been silted up and are out of repairs. A more vigorous effort on the part both of Government and people is necessary to make the most of this ancient form of irrigation, especially in tracts where canal irrigation is impossible or unsuitable.

(3) *Canals*—This is now the most important form of irrigation in India and the one specially encouraged by Government. A distinction may be drawn between canals dependent throughout the year upon the natural supply of water from the rivers on which they depend and those provided with artificial storage. The first type has been developed mainly in Northern India in connection with the Himalayan rivers which flow throughout the year, the snow on the mountains serving as an inexhaustible reservoir during the dry months of the year. The same is the

* "When the cultivator has to raise every drop of water which he uses from a varying depth, he is more careful in the use of it; well water exerts at least three times as much duty as canal water. Again, owing to the cost of lifting, it is generally used for high grade crops. It is estimated that well irrigated lands produce at least one-third more than canal watered lands. Although the huge areas brought under cultivation by a single canal scheme tend to reduce the disproportion between the two systems, it must be remembered that the spread of canals increases the possibilities of well irrigation by adding, through seepage, to the store of sub-soil water and raising the level. *Indian Year Book*, 1928, p. 342.

case in Madras to some extent, where the cold weather rains are heavier than in Bombay. The second type of canals has been adopted for the Deccan, Central Provinces and Bundelkhand. Here, the rivers while flowing in torrents in the monsoon, shrivel up during the dry months of the year and, therefore, artificial storage is a necessity.

The first type of canals may be again subdivided into two classes, (a) the inundation and (b) the perennial canals.

(a) *The inundation canals* are drawn directly from the river without the use of any barrage. They do not obtain water until the river is flooded and reaches a certain level, the supply of water in the canal fluctuating with the natural flood level in the river. The lands in Sind and Punjab are irrigated by such canals drawn from the Indus and Sutlej respectively. In Sind, most of the canals are inundation canals, which being dependent on the natural flood level receive a scanty supply, when the level is low; while with fairly high and prolonged floods permit of wide-spread cultivation. Irrigation is thus confined to the period from June to September and during the latter portion of the year no cultivation is possible without the use of wells. The Sukkar Barrage now under construction in Sind is intended to remedy this defect by constructing a barrage across the Indus, by means of which it will be possible to maintain the water level in the canals above it at a sufficiently high level to provide flow irrigation all the year round. Similar steps are being taken in the Punjab, the main reason for the delay in undertaking such works being their heavy cost. The Sukkar Barrage is estimated to cost about 18 crores of rupees including the cost of the canals and is expected to bring under cultivation an additional $3\frac{1}{2}$ million acres and to pay a net revenue of more than 10% on the capital outlay.

(b) *Perennial canals* are, as indicated above, constructed by putting some form of barrage across a river which flows throughout the year and diverting its water by means of a canal to the country to be irrigated. They are thus independent of the natural level of water in the river. Within this class fall the great perennial systems of the United Provinces and the Punjab. Some of the

inundation canals in Sind and Punjab are being transformed into perennial canals.

(c) *Storage works canals*.—These are constructed by building a dam across a valley to store the rain water during the monsoon. The water so held is distributed to the neighbouring lands by means of the canals drawn from the storage. The expedient of storing the rain water during the monsoon has been practised in India from very old times. Such works have been constructed in the Deccan, Central Provinces and Bundelkhand.

(B) *For the purpose of indicating the source from which the funds for the construction of Government irrigation work are provided they were classified until 1921 as follows*.—(i) *Productive*, (ii) *Protective* and (iii) *Minor*.

(i) *Productive works*, were those expected to yield a net revenue within ten years of their completion, sufficient to cover the annual interest charges on the capital investment. These works are found mostly in Northern India and Madras. The average area irrigated by such works was 19·65 million acres in 1921–24, and the capital invested in them at the end of 1923–24 was Rs. 56·08 crores and 64·9 crores in 1925–26.

(ii) *Protective works*, were those not expected to be directly remunerative but rather intended to ensure the protection against famines of precarious tracts like the Deccan. Such works diminish the necessity of periodical expenditure on the relief of the population in times of famine. The cost of these works is a charge on the current revenues of Government and is generally met from the annual grants set aside for famine relief and insurance. Though not directly remunerative and in fact very often resulting in loss, protective irrigation works are economical in the long run and ensure the economic stability of precarious tracts. We shall point out later on how, in the past, Government concentrated more on the productive than on the protective irrigation works and how a more liberal outlay on the latter is urgent and desirable. The average area irrigated in the triennium 1921–24 by unproductive works was 3·10 million acres and the capital invested in them at the end of 1923–24 was Rs. 33·25 crores.

(iii) *Minor irrigation works* :—This was a miscellaneous class consisting of works, especially tanks, belonging mostly to the pre-British period, which the British Government have taken over and improved, and including only a few small works belonging to the British period. The minor works were further distinguished according as capital and revenue accounts were or were not kept and they were all financed from current revenues. Loans were permitted only in the case of productive irrigation works.

Since 1921, this old classification has been altered and it will in future be possible to finance any work of public utility from loan funds. The classes of productive and minor works have been abolished and all irrigation works are classified as either (i) productive or (ii) unproductive without reference to the source whence the funds for their construction are provided.

(iv) *Extent, growth and revenue* :—The total area irrigated from all sources in British India was in 1925-26, 50, 812, 567 acres or, excluding area sown more than once, 47, 565, 781 acres, i. e. less than 25 per cent of the total cropped area. As regards the irrigated portion, about 12.9 per cent of the total cropped area is irrigated from Government works, over 5 per cent from wells and about 6 per cent from other sources, mainly small private tanks. There has been during the last forty years a steady growth in the area irrigated by the Government works. From 10½ million acres in 1878-79, the area annually irrigated rose to 19¼ million acres at the beginning of the century and to 28.1 million acres in 1919-20, the record year up to that date. This record was, however, again surpassed in the year 1922-23, when the total area irrigated by all classes of works in India amounted to 28½ million acres, a figure which was nearly reached again in 1925-26 when it was 28 million acres*. The main increase has been in the class of productive works which irrigated 4½ million acres in 1878-79, 10½ million acres in 1900-01 and 19.4 million acres in 1925-26. The total length of main and branch line canals and distributaries in operation amounted to about 67,000 miles as against 39,142 miles in 1900-01. The estimated value

* See Harris: *Irrigation in India*, pp 89 and the *Indian Year Book* 1928. p.338.

of the crops supplied with water from Government irrigation works was Rs. 145 crores. The annual value of wheat export from the Punjab has increased from 1 million to 6 million sterling. The total capital outlay on irrigation and navigation works, including works under construction at the end of the year 1925-26 amounted to Rs. 99'84 crores as against Rs. 42'36 crores in 1900-01 giving an average increase of Rs. 1'8 crores a year. The gross revenue was 11'46 crores and the working expenses 4'06 crores, giving a net return on capital of 7.41 per cent.† The return from individual irrigation works shows, however, a large variation. Some of the Deccan irrigation works hardly yield about 1 to 2 per cent, while some productive works in the Punjab yield about 17 per cent on the capital outlay. The distribution of the area under irrigation from the various sources is brought out by the table on p. 266.

This table shows the relative importance of the various sources of irrigation and the extent of the total irrigated area. The provinces most advanced in irrigation are the Punjab, Madras and the United Provinces. In Bombay, of the total irrigated area of about 4 million acres, Sind alone accounts for 3'7 million acres. The Bombay Deccan and Central Provinces show a very poor development of irrigation, though the need for it is greater in these regions of precarious rainfall than elsewhere. Bengal, Burma and Assam also show limited progress but their need is much less owing to their more favourable position regarding rainfall.

(v) The Irrigation policy of the Government:—The British Government inherited from its predecessors some of the present irrigation works, such as a few inundation canals in Upper India, storage works and tanks especially in the Madras Presidency. In the early British period, however, these works were neglected with the result that some of them were ruined. But by the middle of the last century, there was a change in the policy of the Government who began to repair and revive the old works. Progress was, however, retarded by the unsuccessful experiment

† See *India in 1926-27* p. 123.

Province.	Total area sown.	Area irrigated.					Total irrigated area
		By canals		By tanks	By wells	Other sources	
		Government	Private				
Madras	38,791,813	3,616,938	244,983	3,295,175	1,491,235	600,565	9,248,946
Bombay	32,086,540	3,081,324	66,994	136,503	573,204	153,906	4,011,931
Bengal	28,303,800	142,495	187,246	474,748	88,915	474,704	1,368,108
U. P.	42,646,524	2,281,399	26,949	67,679	4,973,016	2,415,868	9,764,911
Punjab	29,709,855	9,499,141	471,674	20,293	3,714,940	113,233	13,819,281
Burma	17,943,559	637,034	278,894	181,462	19,155	310,562	1,427,127
Bihar & Orissa	30,609,200	872,010	870,635	1,615,388	590,036	1,275,379	5,223,448
C. P. & Berar	27,116,461	(a)	1,084,041	(a)	100,915	51,816	1,236,772
Assam	6,393,789	120	193,907	710	...	239,190	433,927
N. W. F. Province	2,660,277	368,058	401,679	...	85,381	41,763	896,881
Ajmer	335,988	...	...	...	63,748	...	79,457
Merwara	138,193	2,488	...	15,709	...	...	3,877
Coorg	254,683	30,861	...	1,389	...	...	51,115
Delhi				542	19,712	...	
Total	256,990,682	20,531,918	3,827,002	5,809,618	11,720,257	5,676,986	47,565,781

(a) Included under private canals. *Statistical Abstract 1926-26 p. 331.*

of entrusting the work to private guaranteed companies. Government subsequently adopted a new policy and undertook the construction and maintenance of productive irrigation works, themselves raising the necessary loans for the purpose. Under this policy, some of the greatest works were constructed in the United Provinces and the Punjab. In the latter province especially the experiment of what are known as Canal Colonies proved highly successful and converted large and barren tracts into fertile fields, which were split into convenient plots; and these were allotted to various classes of grantees, among whom immigrant peasants figured prominently.

The progress of irrigation as a whole was, however, very slow. In the meanwhile, an important change occurred in the policy of the Government consisting in a clear recognition on their part of their duty to construct protective irrigation works in famine tracts, and steps were accordingly taken in that direction in the Deccan and elsewhere. But on account of their heavy cost and the irregular demand for water on the part of cultivators together with the occasional failure of the monsoon, these works did not pay their way, with the result that Government began to concentrate on the more paying works connected with the rivers in the Punjab. The severe famines that visited the country towards the end of the last century and affected the Deccan with particular severity led to the appointment of the Irrigation Commission of 1901 by Lord Curzon's Government. That body held that railway construction, which was recommended as a measure of famine protection, side by side with protective irrigation works, by the Famine Commission of 1880, had played its part in the policy of famine insurance and it was now important to develop the supply of food which ought to be the object of Government's care. They maintained that the field for the construction of remunerative works was limited to Punjab, Sind and parts of Madras, all of which are not so vulnerable to famine. They recommended, however, that these works should be increased as fast as possible, because they would be profitable to the State and would increase the total food supply of the country. For the protection of famine areas, they recommended the construction of protective irrigation works which, though not directly paying,

would dispense with the large expenditure on famine relief which otherwise would be necessary. For the Bombay Deccan especially, they recommended the construction of canals fed from storage lakes in the Ghats. They also recommended the Krishna and Tungbhadra projects. The total cost of these recommendations was expected to be Rs. 44 crores effecting an addition of $6\frac{1}{2}$ million acres to the irrigated area. The subsequent irrigation policy of the Government has been based upon these recommendations and presents a contrast to the earlier policy of concentration on railways to the detriment of irrigation, which called forth the adverse criticism of men like the late Mr. R. C. Dutt. A large number of new works were undertaken and the capital outlay has since been more than doubled on productive and protective irrigation works, while the area irrigated by them has increased by over 70%.

Irrigation has now become a Provincial subject and greater financial powers and larger initiative have been conferred on the Provincial Governments. The sanction of the Government of India and of the Secretary of State is now required only in the case of works estimated to cost over 50 lakhs of rupees. Moreover, the use of loan funds is no longer restricted to productive works. Money will also be available from the Provincial Famine Insurance Grant when it is not required for actual famine relief.

Since 1922, remarkable activity in regard to irrigation works has been displayed and nineteen important works have been completed or are under construction, their cost being over 500 million rupees and the area to be brought under irrigation or under improved watering being 11·22 million acres, which means a total area thrice as large as in the year 1902-03. The more important of the new projects are the Sutlej Valley Project estimated to cost Rs. 14·60 crores and to irrigate over 5 million acres, the Sukkar Barrage estimated to cost about 18 crores and to irrigate over 5 million acres, and the Cauvery Reservoir Project estimated to cost about 5·3 crores and to command a new area of 3 million acres. In Bombay, two major works have been recently completed, the Bhandardara Dam and the Bhatgar Dam. In the United Provinces, satisfactory progress has been made in connection with the Sarda-Oudh canals. Also in the Central Provinces

an elaborate and comprehensive programme extending over a period of fourteen years has been laid down. Almost every province has several schemes under investigation. "When allowance is made for the more promising projects now being considered and for the natural expansion of existing schemes, an ultimate area of 50 million acres is by no means improbable" *

(vi) Irrigation versus Railways:—A few words may be said about the Irrigation vs. Railways controversy, which was very prominent at one time, especially in the closing years of the last century. Mr. R. C. Dutt, who took a leading part in it, showed how, by 1902 only about 38 crore of rupees were spent by government on irrigation as against 370 crores on railways. This disparity appeared especially objectionable on account of the railways being a losing concern down to the opening years of the present century on the one hand, and the intensity of the famines at the close of the last century, on the other. Mr. Dutt argued that under the influence of capitalists speculators and manufacturers in England, pressure was brought to bear upon the Government to hasten railway construction under the guarantee system, with the result that it was overdone. Military considerations of strategy and partly also the growing sense of responsibility for extending relief to the famine-stricken tracts influenced the policy of the Government. It has been already pointed out that protective irrigation works were not paying and, therefore, progressed very slowly. Furthermore, the critics of Government policy alleged that the undue hastening of railway construction accelerated the decline of indigenous industries and led to the congestion in agriculture, thus partially defeating the object of the protective railways for famine.

The above controversy has since considerably abated for various reasons. Now that the railways have become a paying concern and do not involve a drain on the pocket of the taxpayer, his opposition to their extension, while it has not altogether died out, has considerably diminished in vigour. Moreover, as a result of the recommendations of the Irrigation Commission

* *India in 1925-26*, p. 271.

of 1901, Government's irrigation policy has become progressively liberal. In fact, some new works not contemplated by that body have been undertaken.

Turning to the merits of the controversy itself, we may say that while the exact proportion between railways and irrigation may be a matter of dispute, they are in no way antagonistic but supplementary and complementary to each other. It is clear that while an additional food supply can be secured only by irrigation, its proper distribution in the country can be effected only by the railways. It is, however, true that towards the close of the last century Government's irrigation policy was not as progressive as it is today; and even today, there exists a considerable scope for the extension of irrigation, if considerations of immediate profit and loss are allowed less weight in deciding to undertake protective irrigation works. This particularly applies to Bombay, where excluding Sind, only 4% of the total cropped area is irrigated from all the sources, Government's share being about half; though the new projects now under construction or contemplation are calculated to extend it in the near future. In the Bombay Presidency, exposed as it is to the vagaries of a freakish monsoon, the importance of adequate irrigation facilities cannot be exaggerated. The organisation of the Water Court and the Land Development Court of the first Bombay Presidency Agricultural Show (1926) may be taken as a clear perception of this need by Government.

It will not be out of place here to refer briefly to a very interesting scheme put forward by Mr. Keatinge in his "Progress of Agriculture in Western India" (pp. 85-88) with a view to accelerate the pace of irrigation in the Bombay Deccan. He holds that subdivision and fragmentation of holdings together with careless methods of cultivation, which are not suited to irrigated tracts, are mainly responsible for the financial failure of protective irrigation works apart from their high cost. The remedy, therefore, is that the land should be properly levelled up, drained and otherwise made suitable for proper cultivation. It should then be split up into holdings, of which one-third should go to the former owners and two-thirds to companies, the whole land being assured of irrigation. The

companies should be under the obligation of growing sugarcane for the manufacture of refined sugar on a large scale, which will not only encourage the sugar industry but will also enable the companies, who would be in a position to adopt scientific cultivation, to pay a high irrigation cess to the Government and make the irrigation works remunerative. To the objection that the cultivators would lose two-thirds of their land, Mr. Keatinge replies that one-third of the improved and irrigated area is much better than the whole carelessly cultivated land depending upon rainfall. He claims yet another merit for his scheme, viz., economy in the use of water; whose absence at present not only causes loss to the Government, but also results in the deterioration of the land in many canal areas owing to water-logging and salt-effervescence.* So far as the whole country is concerned, we seem to be on the horns of a dilemma. In those tracts where irrigation is highly remunerative as in Northern India, the liability to famine and unstable agriculture is not great, whereas in Peninsular India, especially in the Bombay Presidency, where the monsoon, is very precarious, irrigation is not directly remunerative. The fact is that strictly commercial considerations of profit and loss are out of place here and the question must be looked at from a broader point of view. It is, however, open to dispute whether Keatinge's scheme is either practicable or desirable. The first difficulty would be about inducing the cultivator to part with two-thirds of his holding in return for a benefit which, in his lack of enlightenment, he is likely to regard as highly problematical. But supposing this difficulty is successfully surmounted, the plan of forming large land-holding sugar companies has its own danger, viz., the creation of large capitalist estates possibly under the control of the foreign capitalist.

* Water-logging and salt effervescence are dangers particularly associated with canal irrigation and these dangers have not always been effectively guarded against in the past, so that soils have sometimes deteriorated as a result of irrigation. Also, lack of proper drainage has not only been a handicap from an agricultural point of view but has converted originally healthy tracts into malarious ones. Canal irrigation, therefore, is not merely the work of the engineer but of the soil physicist, the agricultural chemist and the medical and sanitary expert as well.

CHAPTER VIII

AGRICULTURE (Contd.).

LABOUR EQUIPMENT AND ORGANISATION.

§ 1. The human factor : its unsatisfactory nature:—It is no exaggeration to say that efficient agriculture depends on the qualities of the man behind the plough more than on anything else.* In order, therefore, to understand the present position of Indian agriculture, we must make an attempt to assess the merits and the defects of the Indian cultivator. There are two things to be borne in mind with regard to the Indian peasant. One is that, as things stand at present, he must be acknowledged to be inferior in point of intelligence, enterprise and capacity for labour to the European or American farmer. The second thing, however, which it is equally important to remember is that his present inefficiency is not innate or rooted in the nature of things and is, therefore, capable of being remedied.† He is bowed down with the heavy and weary weight of many burdens and handicaps, and the wonder is that he still continues to carry on the struggle for existence and is not altogether extinct.

The question whether race and climate have anything to do with the relative inefficiency of the Indian peasant is highly

*“A study of rural conditions in different countries leads to the conclusion that far more depends upon the human factor than is commonly supposed. Defects in character can and will nullify the richest gifts of nature; while what may appear to be insuperable difficulties are apt to disappear before the sustained application of human energy, human intelligence and human knowledge. Denmark is the classical example of a naturally poor country being converted into one of the most prosperous by well-conceived and well-directed effort”. Calvert: *Weather and Welfare of the Punjab*, p. 25.

† “The Indian peasant is not essentially different from his fellow in other lands. A little experience would show that he is not lacking in readiness in response which would be proportionate to the accessibility and practicable character of the opportunities provided, and to the sincerity and humanity of the people directing the work of instruction and experiment.” Visvesvaraya : *Reconstructing India*, p. 175.

speculative and need not detain us. In practice, the only safe hypothesis is to assume, what is indeed in the present instance highly probable, that the major cause of the backwardness of the Indian cultivator must be looked for in the heart-breaking conditions under which he works. This view is borne out by the fact that the Indian peasant is comparatively alert, tenacious and enterprising in those tracts where the rains are dependable or where irrigational facilities are available and he can confidently expect to reap the reward of his labour. Where, however, conditions in this respect are unfavourable, he is apt to be lazy, pessimistic, easy-going and miserably poor. Dr. Voelcker of the Royal Asiatic Society, who was sent out in 1889 to report on the agricultural practice in India from the modern scientific point of view, has borne admiring testimony to the careful husbandry "combined with hard labour, perseverance and fertility of resource" of the Indian agriculturist. Opinions of this kind bearing the *imprimatur* of high scientific authority must be respected and should leave us in no doubt as to the excellence which Indian farming is capable of attaining under favourable conditions. But we must not allow such laudatory remarks, torn out of their context and mainly intended to correct extreme views in the opposite direction, to lull us into a false sense of security. If the average cultivator in India had been as efficient and go-ahead as the unwary may be led to imagine from encomiums such as that of Dr. Voelcker, the rural problem in India would have been much simpler than it is. It would be not only erroneous but positively mischievous to suppose that, the personal factor in Indian agriculture is all that one could wish it to be and that no special effort is needed to improve the cultivator himself. *It is a matter of the most vital importance to recognise clearly the actual defects and shortcomings of the cultivator, due to whatever causes, and seek remedies for them, directly through education in the widest sense of the term, as well as indirectly through an improvement of external conditions.* If we would paint the Indian peasant, warts and all, without setting down aught in malice, we would have to admit that generally speaking, he is lacking in originality and initia-

tive and is too much wedded to traditional methods and practices, some of which are wasteful and unscientific (as will be seen presently). Also, he is steeped up to the lips in superstitions and prejudices, which in their totality are a serious drag on his economic progress. The dead weight of his inertia, apathy and conservatism is an obstacle in the way of every reform proposed for alleviating his condition*

By his insanitary habits of living, he draws upon himself much avoidable physical suffering with its attendant evils of low vitality and incapacity for persistent and strenuous labour and a sombre outlook on life. He is ignorant, improvident and reckless—a combination of qualities which makes him an easy prey to any one desirous of taking advantage of his weaknesses. He is too prone to waste his substance and energy in needless litigation. He is too fond of locking up his capital in jewellery and trinkets instead of devoting it to such forms of personal expenditure as would increase his efficiency or employing it in more remunerative investment. He generally spends far beyond his means on marriages and other ceremonies and thus walks with open eyes into the money-lender's parlour, from which he is rarely able to get out. He shows an insufficient appreciation of the truth that God is wont to save only by human means and a tendency to rely too much on Providence or some other external agency, and too little on personal endeavour, for remedying every evil which he may be suffering from and for which he is generally inclined to blame Fate or Providence rather than himself.†

Everyone acquainted with rural conditions in India will admit that all these are real evils, and a direct frontal attack must be made on them. "*Take care of his environment and the cultivator will take care of himself*" is a good enough motto, but

* The villager refuses even to contemplate uplift...He has no time or energy for anything but winning bread and the continuance of the species." F. L. Brayne I.C. S., *Village Uplift in India*, p. 120

† In connection with the uplift work in the Gurgaon district, Punjab, Mr. Brayne, who is the soul of the movement, tells us of a new proverb invented for Gurgaon. which says, "zamindar ki beaqli Parmeshwar ka qasur". Providence is blamed for what is really the fault of the cultivator himself. See Brayne, op. cit, p. 9.

a better is, "Improve at once both worker and environment, so that each may help the other."

§ 2. A comprehensive Scheme of Rural Education:—The only way of changing the psychology and the social and personal habits of the peasant is to educate him. It is obvious that so long as ignorance and illiteracy prevail in our villages and barely 6% of the population can read and write, all talk about rural progress is futile. *The absence of wide-spread literacy and of a suitable system of rural education are largely responsible for many of the evils we deplore: illiteracy aggravates indebtedness, promotes improvidence and extravagance, impedes the progress of improved agriculture and, what is more serious than anything else, prevents that mass awakening without which no reform can be permanent. The present system of education needs to be remodelled so as to suit it to the needs of the rural masses and in preparing text-books and laying down curricula, the Educational Department must absorb the result of the labours of and work in consultation with other departments whose servants are brought into contact with the villagers in the course of their duties. The education imparted in the rural schools must be such as will promote interest in and love for agriculture and rural life in general and should cease to deserve the criticism which is often made against it that it creates a bias in the mind of the rural scholar against his ancestral occupation and makes him soft-handed and unfit for agricultural work.*

The present tendency of attaching a spurious value to mere literacy, which makes a person think that he is quite in a different class from his unlettered fellows and fires him with the insensate ambition of driving a quill rather than a plough, must be destroyed by taking special pains to inculcate the dignity of labour and also by making education universal and compulsory. The benefits of education should be extended to both the sexes and it should not be considered necessary to hold up female education till there is a sufficient number of women teachers. Nature study of plant and animal life, school gardens and farms (not so much to teach his business to the agriculturist, who probably knows it far better than the teacher, but for the

sake of atmosphere), text-books dealing with rural subjects, manual training, education with special reference to local subsidiary industries, physical and boyscouts training and lessons in first aid would be some of the items in a complete scheme of rural education. *The educational system so devised must be largely controlled by the farmer himself and must employ efficient, and well-paid teachers imbued with the spirit of service and possessing what is called the "country-sense."* Not the least important work connected with the spread of education in rural areas, is the production of good books by translations from foreign languages or otherwise. Insufficient attention has been paid hitherto to this all-important matter.*

A proper scheme of adult education is also necessary in order to increase the all-round efficiency of the farmer and in order that the present generation should be in a position, at least partially, to take advantage of modern developments in agriculture.

Adult education is also important as tending to prevent the too frequent relapse into illiteracy of the young villager as soon as he leaves his school. *Adult education should also include women within its scope* as it is important to improve the ideas of women so that they should not act as clogs in the wheel of progress.

A special machinery is needed for carrying literacy and general enlightenment to the grown-up people and would include such things as night schools, continuation classes, libraries and reading rooms, magic lantern and cinema shows etc. The cinema especially, has great uses as an educative agency. It brings in new wants and fresh incentives to exertion and as a vehicle for carrying enlightenment to the untutored mind of the villager it is far more effective than the mere written or spoken word. Much of adult education must depend on such agencies as these rather on formal instruction in regular schools. In this connection reference may be made to an interesting development in adult education in rural areas. Demonstration trains are being run on some of the main railway lines like the Eastern Bengal Railway as a result of the co-operation between various bodies such as the Railway Publicity Department, the

* In this chapter we have made considerable use of our Paper on *Some Aspects of Rural Reconstruction in India* in the Indian Journal of Economics, Conference No. 1928.

Public Health, Industries, Co-operation, Veterinary and Agricultural Departments etc. Apart from interesting exhibits displayed inside the train, open-air demonstrations including lectures with cinema or lantern-slide shows are given.*

3. § Physical inefficiency of the peasant; its causes and cure:—

‡ Many of our villages are ravaged by major diseases like malaria, “our greatest morbidity scourge”, plague, cholera, dysentery, tuberculosis, Kala Azar, hook-worm and the so-called “minor” diseases such as skin diseases, leprosy etc. *Disease is one of the major causes of the inefficiency of the peasant.* At the risk of wearisome reiteration we may once more state briefly the different ways in which work is disorganised and economic progress is hindered by the presence of disease. In the first place, disease may reduce the economic power of a community by carrying off the strong and the able-bodied and decreasing the proportion of workers to non-workers. Secondly, it debilitates those whom it often attacks without killing them. It thus causes not only shortage of labour but also shortage of labour power. Thirdly, it often temporarily incapacitates the workers when agricultural operations are in full swing and lastly, it tends to make people lethargic, listless and fatalistic. It is quite clear, therefore, that *the improvement of public health and sanitation is necessary for making the cultivator efficient and progressive.* A campaign of public health and self-hygiene must be opened on a large scale to wipe out ignorance and apathy in respect of the laws of health, to create a “public health conscience” and overcome prejudices some of which are all the more formidable because of their being bound up with religion.

Health Publicity Bureaus, Baby Weeks, Red-cross work, Child-welfare, Maternity Leagues, Anti-malarial societies and Co-operative Dispensaries have all a part to play in the service of village health and sanitation.¶ Drainage of irrigated tracts and marshy swamps, supply of pure drinking water and village housing (of which more anon), are all necessary.

* See Report on Indian Railways 1926-27 p. 92

‡ See Evidence, (Agricultural Commission) Vol II, p. 141.

¶ See the evidence of the Public Health Commissioner with the Government of India before the Agricultural Commission, Vol, I p. 147.

The absence of *proper medical facilities* in village areas constitutes a serious difficulty. It is necessary that the claims of indigenous systems of medicine should be properly investigated and the use of such indigenous drugs as are found to be effective should be encouraged as substitutes for the more expensive allopathic drugs. The Bombay Government have recently started an interesting experiment for increasing medical facilities in rural areas by the establishment of the Village Aid Scheme, under which, in certain selected districts of the Presidency, primary school teachers undergo a short course of medical training at the District Civil Hospital and then return to their villages with medical chests. They treat simple cases, render first aid and send the more serious cases to a neighbouring dispensary.

Closely connected with rural sanitation is *the problem of providing sanitary and decent dwellings in the villages*. It must not be supposed that the housing problem exists in cities alone. For although there is more space in the villages, the houses themselves are generally flimsy structures of mud, with a thatched room and a single door and hardly any windows, dark and infested with mosquitoes, rats and other vermin. Human beings and animals often share the same room breathing each others' exhalations, an arrangement injurious both to man and beast. A supreme effort is needed to dismantle these village "slums" and replace them by decent and clean dwellings. *Rural co-operative housing societies financed and otherwise helped by Government* should be started. The state may not only grant loans directly but may also help by guaranteeing the interest and redemption of loans made by special financial institutions started for the purpose.

§ 4. Need for closer contact between Village and Town:—
The reform of the villager consists essentially in replacing the various mistaken, stupefying and pauperising ideas, which hold him down at present, by new, daring and inspiring ones. Anything, therefore, that fosters the contact of the village with the out-side world and brings it within the orbit of more progressive influences emanating from the towns should be welcome. The villages are no longer land-locked and isolated

as of old, but much still remains to be done in the way of cheap and easy transit by *more and better roads and railways*. We may also refer here to the *Post Office as a civilising agency*.^{*} The part which the Post office can play in the life of a people will obviously depend on the extent that literacy prevails. The provision of postal facilities, however, itself stimulates the desire for literacy and helps to sustain literacy once attained. The Post Office may also help in propaganda work by putting up interesting bulletins prepared specially for the instruction and amusement of the villager. The Postal Savings Banks would also promote thrift among the people, and coupled with the cash certificates system make investment of small rural savings possible. A minor advantage of the post office lies in its serving as an agency for the distribution of seeds, and cheap quinine in villages. Wireless and broadcasting have immense possibility and will increase rural amenities and bring about an undreamt-of change in the life of the village people. Developments in this connection, however, are not matters of the approximate future.

§ 5. *Methods of propaganda work*:—In order to improve the cultivator physically and mentally, continuous and intensive propaganda, through official and other public servants as well as through non-officials agencies, is necessary and much care is needed in *selecting the right type of men for propaganda work*. Knowledge of rural conditions, energy tact, imagination and genuine sympathy with the villager and his difficulties are essential qualifications.

Making an effective appeal to one's hearers is an art which the would-be reformer must take some pains to learn before he confronts a village audience. Many excellent discourses replete with useful knowledge fail to take effect because the speaker does not understand how to put things to his hearers. As Mr. Brayne acutely remarks, "If the village audience maintains a stony silence, the lecturer can cut no ice but once the villager can be drawn into an argument or made to laugh at himself, the battle is won." The speaker must be *l'Allegro* as

^{*} See Memorandum and Evidence of Mr. H. A. Sams, Dy. Director-General of Posts & Telegraphs. Evidence, Agr. Comm. Vol. I,

well as Il Penseroso. He must jest as well as preach and it is not given to everybody to be able to do this.

So far we have spoken about the manner in which the villager needs to be approached. We may now proceed to point out that the actual reform advocated must be within the reach of the agriculturist and it must be thoroughly tested before it is preached. Anything in the nature of unreal theorising without thorough practical acquaintance with the methods in use must be avoided. The graceful minuet-dance of fancy must give place to the toilsome, thorny pilgrimage of the understanding.* The technique developed in India is the result of centuries of practical experience and contact with the soil, and, in the words of Sir James Mackenna, "has been built up on the traditional customs of years in which reside, though unexpressed and unexplained, deep scientific principles the reasons for which can only gradually be elucidated." There is no doubt that the agriculturist in India has much to learn from the agriculture of more advanced countries. The fact that he cannot always give reasons in explanation and justification of his methods is a handicap, because blind obedience to tradition prevents quick adaptation of agricultural practice to changed circumstances. Methods which were useful at one time may survive their usefulness and because the knowledge of the agriculturist is purely empirical he is not able to realise this quickly. All the same, for reasons suggested above, the modern investigator should presume, until the contrary is proved, that there is some rational foundation for existing methods and patient study and inquiry are necessary before improvements can be suggested with advantage.

§6 **Hired agricultural labour:**—The foregoing discussion about the personal factor in Indian agriculture has primarily been with reference to the cultivator who owns the land he cultivates. For the sake of completeness of treatment, it is now necessary to say a few words first about hired labour and secondly about the part which the landlord plays in the agricultural economy of India. As regards hired labour, the position must be pronounced far from satisfactory. Agricultural labourers who hire themselves out are partly landless labourers, *a class which is at present small but*

* The phrase is Carlyle's but used in a different context.

which is tending to grow, and partly those who possess a bit of land, which, however, is so small that their owners are under the necessity of hiring themselves out for work on other people's land in order to be able to make a living. Labour drawn from either of these classes is dear, inefficient and unreliable. The modern facilities for migration as well as the increasing demand for labour on the part of railways and public works as well as commerce and industry put the labourers in a strong position. Owing to the heavy mortality caused by plague and the recent Influenza epidemic, there has been an appreciable decrease in the number of labourers. Lastly, there is also a certain tendency on the part of small peasant proprietors to retire from personal labour on their farm and rely on hired labour, as soon as their financial position should permit the indulgence of this luxury. Thus forces on the side of supply as well as those on the side of demand have in recent times operated to raise the wages for hired labour. But there has been no corresponding improvement in its efficiency. The relatively high wages instead of serving as a stimulus to greater exertion seem to have the opposite effect. The labourer chooses to work less and there is no perceptible increase in his standard of life, and, through a higher standard, in his efficiency. The labourer, in short, has the same weaknesses and short-comings which characterise the cultivator and he also may be expected to benefit by the measures devised for bringing about a general revival in the rural areas.

§ 7. The Landlord and his place in Rural Economy:—One of the greatest difficulties under which Indian agriculture labours is its failure to attract the necessary brains, enterprise and capital. Modern amenities of life such as education, sanitation and well-developed communication have been largely monopolised by the towns, inspite of the fact that the money for the provision of these facilities has been drawn mostly from the rural side. The wider opportunities and greater attractions offered by the town have induced an exodus from the village to the urban areas of its best intelligence and enterprise leaving a blank in the village which it is not easy to fill. Lastly, the educated people of the towns and the landlords have not hitherto cared much to study rural problems and

to understand and meet rural needs. Their knowledge, resources and enterprise have not been made available for the revival of village prosperity. The ignorance of the urban population in this country on agricultural matters is "so colossal and so genuine as almost to deserve respect"*. *The leadership of big landlords such as Bakewell, Bates and "Turnip Townshend," to whom English agriculture owed so much in the 18th century, has had no counterpart in India.* One of the hopes entertained by those who were responsible for introducing Permanent Settlement in Bengal was that it would create a class of big landlords who would live on their estates and whose personal influence and material help would be of great benefit to the cultivators. It was expected that the landlords would act as powerful instruments not only of material but of intellectual and cultural advance in the rural areas. This expectation, however, has unfortunately not been fulfilled. The landlords with very few exceptions have preferred to live in the big towns away from their properties and interest themselves in their estates and tenants merely as sources of rents. The only function they perform is that of a distant suction-pump for drawing rents from the tenants with such thoroughness as the Tenancy Laws permit. *Absentee landlordism* is the rule not only in Bengal but also in other parts of the country, wherever there is a considerable landlord class. Speaking of the evils of absentee landlordism Carver says,† "Next to war, pestilence and famine, the worst thing that can happen to a rural community is absentee landlordism." This evil is particularly serious in those parts where the Zamindari system prevails, though it is not altogether absent even in Rayatwari areas. We may say that the landlords, as a class, are even more of a detached and outside agency so far as the development of land is concerned than the State. The State has at least charged itself with such important functions as provision of irrigation facilities, roads and railways, agricultural education, grant of Tagavi loans etc.; whereas the landlord as a rule does nothing whatever for the improvement of the land. It is of the greatest importance for agricultural pro-

* Adapted from A. Collett's remark quoted by Calvert: *The wealth and Welfare of the Punjab*, Preface, p. 1 The observation refers to English conditions but is not less true of India.

† *Principles of Rural Economics*, p 377.

gress that it should secure the active interest of the landlord class; this would prevent rack-renting and establish personal relations between landlord and tenant to their mutual advantage, and it will ensure more rapid progress. The big landlords possess at least two requisites of progress viz., capital and intelligence, and if they only develop a new sense of values and realise that, there is not only greater profit but also greater pleasure in living in the country and helping forward the cause of rural renaissance than in idling away their time uselessly in the cities, we will not have to wait for the slow process of a general public awakening, before agricultural reform makes any considerable headway. *The landlord can help reform in various ways, by starting home farms, building up pedigree herds of cattle, producing improved strains of seed and introducing more efficient implements and last but not least, by familiarising the bucolic mind with the idea of progress.*

One of the reasons why the landlords do not live in the villages is the total absence of amenities of civilised life in rural areas, and as this defect is removed they will no doubt be encouraged to come and live among their tenants. But it ought to be the privilege and the duty of the landlords themselves to help in increasing the attractions of the countryside. They must not wait for the amenities to be created by the efforts of the State or other agencies but must try to create them themselves by living in the villages and promoting sanitary and educational reforms there. It would indeed be unreasonable, not to say undesirable, to insist that every one who owns land must live on his property. It would be absurd to suggest, for example, that a prosperous and highly competent doctor in a big city should not own any land unless he is prepared to go and live on it. It may be far more advantageous, not only from the individual point of view but also for the community, that he should be in a position to give undivided attention to his profession. At the same time, it would be unjust in any way to penalise or discriminate against people who are earning money in other occupations and who are desirous of investing their savings in land without giving up their occupation in favour of agriculture. Such a procedure is sure to bring down land

values and check agricultural development by preventing the free flow of capital into it. It would, however, always be possible for the landlord, whose personal absence from his property is unavoidable and pardonable for reasons suggested above, to see to it that he is not rack-renting his tenants and is treating them in such a manner as to produce in them an adequate incentive for careful cultivation of the land. The case of a landlord, however, who is not following any alternative profession and who is living entirely on the rents from his estate is on a different footing. It is clear that he owes it both to himself, his tenants and to the community in general that he should actively interest himself in the development of his estate.

§ 8. The duties and responsibilities attaching to land-ownership :—It has always been recognised that, of all forms of property, property in land carries with it special duties and responsibilities. On purely theoretical grounds, it may occur to us to ask how the position of a shareholder in a joint-stock company, who is merely content with drawing dividends without taking any part in the management, is different from that of the landlord who is similarly content with drawing rent and doing nothing else. The answer to this is in the first place, that it *would* be a good thing if the shareholder were to take a personal interest in the affairs of his company; his failure to do so is often the cause of mismanagement and consequent ruin of many a joint-stock enterprise. It must, however, be remembered that the average shareholder has neither the leisure nor the necessary knowledge and ability for taking an intelligent interest in the affairs of his company and the enterprise in which it may be engaged. Again, he is only one of many shareholders and his individual attitude does not alter circumstances for better or for worse to any appreciable extent. Because a particular shareholder does not actively help in the management, it does not follow that the concern is left without management altogether. Joint-stock organisation has reached such a high pitch of efficiency that there is generally ample provision for able management and leadership in spite of the indifference of the generality of shareholders. Also, as regards the workmen or labourers, we must remember that their position is more favourable than that of agricultural tenants because

they can unite and create organisations like the Trade Unions for effectively expressing and enforcing their wishes. Lastly, as Mr. J. M. Keynes has pointed out, † the trend of modern joint-stock institutions when they have reached a certain age and size, is to socialise themselves and assume the status of public bodies rather than individualistic private concerns. The general stability and reputation of the firm are the first consideration and dividends assume quite a secondary position. Under these circumstances, the interests of the labourers (and the consumers) are particularly looked after so as to avoid public criticism. In all these respects, the case of land stands by itself and the idea that all property is a trust to be administered on behalf of the community is felt to have a greater applicability to land than to other forms of property. And in the present helpless condition of the Indian ryot, it is necessary to give prominence to this idea and to make the landlord an effective and useful agent in rural uplift work.

TECHNIQUE AND EQUIPMENT.

§ 9. Technique: methods of cultivation:—Having considered the personal factor in agriculture, we will now pass on to discuss questions relating to agricultural technique and equipment.

The Indian agriculturist for the most part follows *methods of extensive cultivation which are unsuitable* in view of the smallness of the average holding, with the result that the yield is much smaller than it need be. Contrasting Indian conditions with those in Japan in this respect, Sir M. Visvesvaraya writes, "Japan although not entirely self-sufficing in the matter of food, maintains normally a population of 56 millions on a cultivated area of 17 millions, or one-third of an acre per head as against India's five-sixths of an acre." Agriculture is carried on in Japan and China very intensively and thoroughly, almost like gardening, and the salvation of the Indian peasant lies similarly in adopting intensive methods of cultivation. This involves, among other things, more expenditure on permanent

† *The End of Laissez Faire*, pp 42-43.

improvements and irrigation, more efficient cultivation, careful selection of seed, a proper system of rotation of crops and adequate manuring. We have already disposed of the first two items in this list. As regards methods of cultivation, they can occasionally be seen to reach a very high standard in India, but in many parts of the country there is *considerable scope for improvement in respect of preliminary preparation of the soil, sowing harrowing, weeding, thinning and spacing out and harvesting etc.* The value of *pure seed* of good quality is great but very often the farmer is either not careful enough in selecting his seed or he fails to get it even when he realises the necessity of good seed. There are a certain number of *seed societies and seed farms*, but they need to be multiplied many times to ensure an adequate supply of seed of high quality to the farmers in all parts of the country. As regards rotation of crops, there has been a distinct falling off from former standards. The lure of immediate gain has in too many cases led to an unhealthy and in the long run unprofitable concentration on certain crops like cotton and wheat. Bitter experience will no doubt eventually make the cultivator realise the necessity of *a rational system of rotation*, but something may also be done by propaganda. A welcome recent development in certain parts is the introduction of groundnut as a *rabi* crop into the scheme of rotation and this has been facilitated by the immediately profitable character of this particular crop. The possibilities of giving a place to fodder crops in a regular system of rotation need to be properly explored, especially in view of the present acuteness of the problem of an adequate food-supply for the cattle.

§ 10. Manure:—The application of manure and fertilisers is a vital factor in increasing the yield from the soil. Experiments show that manure, in many cases, contributes about 50 per cent of the increased yield attainable by improved methods of farming. Mr. Keatinge gives the following table in which the various causes of improved yield in England, Germany and France are assessed according to their percentage effect, and the pre-eminence of manure as a contributory factor has been brought out:—

§	England	Germany	France
	Per cent.	Per cent.	Per cent.
Improved manure	Considerable	50	50 to 70
Improved cultivation	Most of all	25	15 to 30
Improved seed	19	15	5 to 20
Improved rotation	Little except indirect.	10	...

It is not always the farmer's fault that the land is often insufficiently manured. There may be no irrigation facilities, and heavy manuring of land in dry tracts is worse than useless. Also, it may often be that the required manure is very scarce and difficult to get or too expensive, having regard to the limited means of the average cultivator. One of the wasteful practices to which people in India are addicted is the use of cow-dung as fuel. This should be discouraged, and in so far as the use of farmyard manure as fuel is a matter of necessity,[§] the solution would lie in providing alternative forms of fuel. Waste areas near villages should be planted with fuel trees and fuel reserves should be established as near the village as possible through the agency of the Forest Department and Local Bodies. Cattle urine is usually allowed to run to waste and there is still much prejudice against the use of human excreta as manure though it is gradually breaking down.

By dint of unwearied and incessant propaganda, Mr. Brayne has been able to get the villagers in the Guragaon District, Punjab to see the advantage of pits into which all village sweepings are thrown. This serves the double purpose of cleanliness and conservation of manure. More than 40,000 pits, all six feet deep and ten or twelve feet wide, have thus been dug by the villagers in the course of a few years. Another pet notion of Mr. Brayne is

§ Keatinge: *Agricultural Progress in Western India*. p. 90

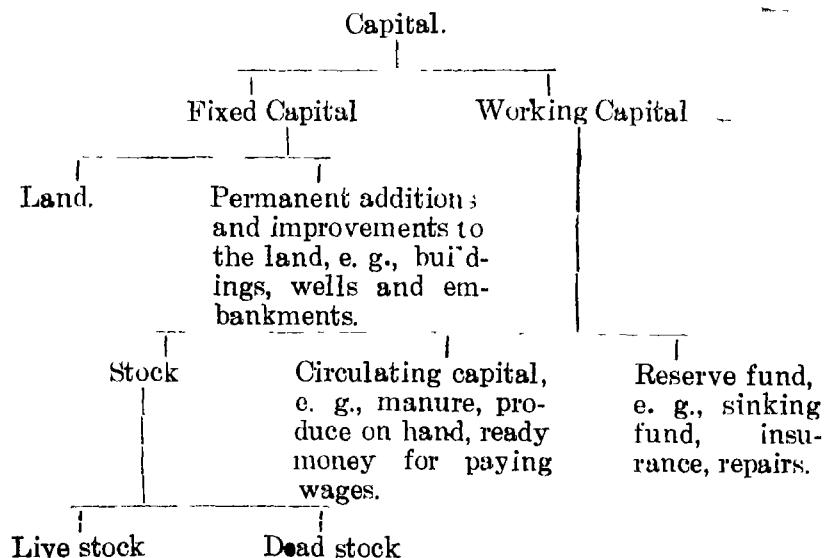
§ The use of cow-dung as fuel is not always due to the fact that no other fuel is available. It is often just thoughtlessness or prejudice. In Punjab, for example, the belief is apparently common that *ghee* cannot be made without dung cakes. See Brayne, *op. cit.* p. 4.

to get the villagers to use the "pits for latrines for men and women with hedges for privacy and planks across for convenience" to ensure clean villages and heavy crops. The full utilisation of human excreta and all garbage and sweepings for agricultural purposes would mean that the present drainage systems in cities and towns, where all such manurial matter is let into the sea or river water, would have to be changed.

Green manuring with *sun* hemp etc. is in use only in the most progressive tracts and as regards chemical fertilisers, their use has only just begun. In canal and other irrigated areas, ammonium sulphate, bone-meal, fish manures and oil-cakes are being used in gradually increasing quantities, thanks to the propaganda work of the Agricultural Department. The Fiscal Commission have recommended the imposition of a moderate export duty on oil-seeds, oil-cakes, fish and bone manure, the proceeds being earmarked for financing propaganda in favour of an increased use of these manures.

EQUIPMENT.

†The following classification has been suggested by Mr. Keatinge as giving a comprehensive idea of the varied equipment which a farmer ought to possess :—



† *Rural Economy in the Bombay Deccan*, pp. 102-03.

Keatinge proceeds to remark that "if a man's business is to be put on a sound basis.....and the maximum profits extracted from the land, every form of capital enumerated above must be provided for in some way or other; and it is only by a proper understanding of each form of capital that correct accounts can be kept, and the true source of profits and losses determined."

§ 11. Implements:—The Indian agriculturist still largely uses his old and simple implements, which are cheap, easy to repair and effective to a degree; but greater productivity obviously depends on the use of improved implements. Iron ploughs, sugar-cane crushers and small pumping machinery have been introduced to some extent, but much still remains to be done in this direction. American methods based on an extensive use of agricultural machinery are ill-suited to a country of small holders but these limitations are capable of being partly overcome by co-operative and joint farming. It is interesting to note that a large number of tractors are being employed by farmers in Gujarat. Most of these have been bought and are being used by speculators who work on hire, though a few of the larger landowners have purchased their own. In Upper Sind, the large Zamindars are showing considerable interest in tractor development and if demonstrations could be carried on and reliable data given to them, this is likely to result, in the near future, in increasing the demand for tractors, the use of which makes possible deep and thorough cultivation of the soil such as is beyond the capacity of ordinary bullocks, and effects great saving of time.* There is also a large scope for the improvement of agricultural implements worked by hand power and cattle. The work of popularising the use of improved implements clearly falls within the scope of the Agricultural Department, Agricultural Associations and Co-operative Societies, and it is desirable that all these agencies should combine and co-ordinate their activities. Thanks to the work of the Agricultural Department, the standard of farming in India is being steadily raised, though

* See The Annual Report of the Director of Agriculture, Bombay Presidency, 1926-27.

not as rapidly as one might desire. Among other measures adopted by the Department, is the appointment of agricultural engineers to advise cultivators and to arrange for the installation of machinery particularly for irrigation etc. Attention is also being given to the manufacture of improved implements which would be cheaper than those used in the West and simpler to operate. To ensure full benefit from new implements, it is necessary that they should be manufactured in the country itself and full provision should be made for the supply of spare parts and facilities for repairs. Agricultural machinery valued at several lacs of rupees was exhibited at the great Bombay Presidency Agricultural Show held at Poona in 1926 October. This testifies to the growing demand for up-to-date machinery in India and the scope that exists for its employment. The machinery exhibited was, however, for the most part of foreign manufacture and if special efforts are put forth including state-aid to indigenous manufacturing firms, our present dependence on foreign supply may be expected to diminish considerably or vanish altogether.

§ 12. Live Stock:—Cattle are the most important part of the live stock possessed by the Indian cultivator. "Without them the fields remain unploughed, store and bin stand empty, and food and drink lose half their savour, for in a vegetarian country what can be worse than to have no milk, butter nor ghee?"* In India, *cattle supply practically all the motor power* for ploughing, for lift irrigation etc. They are also the *principal source of manure* used by the cultivator. Also, *carting for hire* is almost the only subsidiary rural industry in India and strong and healthy cattle are necessary as draught animals. Again, the improvement as regards both quantity and quality of cattle is important for the development of a well-organised *dairy industry*, which offers great possibilities as a subsidiary rural occupation in India. Lastly, the necessity of an abundant supply of milk is obvious in a vegetarian country where *milk affords the only easy means of rendering the diet of the people rich enough in nutritive elements for health and strength*. In spite of the supreme importance to India

of an adequate and healthy live-stock, conditions in this respect leave much to be desired. India has only 61 cattle per 100 of the population, Denmark 74, the United States 79, Canada 80, Australia 259 and New Zealand 150. There is consequently too great a pressure on plough cattle. Whereas a pair of plough cattle can deal satisfactorily with not more than 5 acres of land, it is called upon to deal with an area ranging from 7 to 44 acres in the different provinces of India.† The excessive pressure on cattle is one of the causes of their inefficiency and we may also refer in passing to the adverse effect of over-work on milk-yielding capacity.*

§ 13. Problem of fodder supply:—The cattle in India are not only overworked but also ill-fed. Over the greater part of India there is a *shortage of fodder* from December to July. The condition of the cattle is especially deplorable between March and July when they roam about on the parched fields picking up a precarious living and a large number of them are reduced to bags of bone by the time the rains commence. As soon as the rains set in and the young grass begins to grow, they gorge themselves on it and suffer from various diseases as a consequence.‡ As Keatinge says, there is hardly any lesson that the people in India have to learn “more important than the growing, efficient storage, and economical use of fodder crops.” § The problem of an adequate fodder supply is more serious than that of food, as fodder is not easily transported from place to place on account of its large bulk and small value, and it is, therefore, all the more important that the cultivator should devote more attention to it. The old days of extensive pastures are gone never to return, owing to increase of cultivation. A more sympathetic forest administration in the matter of providing grazing facilities and fodder will remedy the situation to some extent. The common pasture land in the village is too small in area, and owing to the carelessness of the villagers, it is rendered less valuable than it might be. As it is, it is generally blocked with brambles and useless trees and bushes of all kinds. It is necessary that people

* See ‘*Rural India*,’ April 1927, p. 183.

† *Ibid.*

§ *Rural Economy in the Bombay Deccan*, p. 123.

should learn the value of growing fodder crops and laying down pastures. Conservation of fodder stacked dry or preserved green in silos or pits is a matter which requires careful attention. Every care should be taken to prevent wastage and suitable chaff-cutters should be used for this purpose. Stall-feeding should be more widely resorted to. Government may encourage all these methods by rewards or remissions of land revenue and premia for well-kept cattle and fodder. The economical use of fodder-supply implies the reduction in the number of useless cattle. A large number of maimed and worn out bullocks and barren cows are maintained in a half-starved condition. In the Western countries, they would be slaughtered for food. In India, the demand for beef is comparatively negligible and killing off useless cattle is a procedure against which the sentiment of the cultivator and a large part of the public revolts. The cultivator does not kill them outright but cannot afford to feed them properly. His attitude is that of "thou shalt not kill but need'st not strive officiously to keep alive." It would really be much kinder both to himself and to the animals, who are uselessly kept alive in a wretched condition, if the Indian cultivator were to take a more business-like view of the matter like the Western farmer. But the prejudices in this connection are so deep-seated that we will have to wait long for reform in this direction. Another way of reducing the pressure on the available supply of fodder is to evolve dual-purpose breeds which will render buffaloes as sources of milk largely superfluous.

§ 14. Cattle breeding :—Cattle-breeding is regarded in India as an accident of husbandry rather than as essential part of it. *Elimination of bad bulls* by compulsory castration is necessary for improving the quality and the Veterinary Department has recently begun to perform this important function by methods unobjectionable to the religious susceptibilities of the people. *For selective breeding and cross-breeding, animals need to be enclosed.* The cattle in Gujarat are superior and present a contrast to the scrub half-sized and quarter-sized animals common in the Deccan. This has been attributed to the prevalence of enclosures in Gujarat. *Co-operative breeding societies* have been started in some places but some authorities believe that this

requires individual interest and care and does not very well lend itself to treatment by the co-operative method. The Imperial and Provincial Departments of Agriculture are devoting much attention to the problem of cattle-breeding with a view to raising a more efficient live-stock both as regards draught and milk. Breeding work is being conducted at the Imperial and Provincial cattle farms in order to bring about an improvement in the milk yield of cattle by better feeding and selective breeding as also by crossing indigenous breeds with sires of European pedigree. *At Pusa, the milk yield of the pure Sahiwal herd has been very greatly increased by these methods, and the experiments that are being conducted are expected to end in the evolution of a well-defined Sahiwal-Ayrshire strain sufficiently hardy and adaptable for Indian conditions. *The apathy of the big land-owners* is a stumbling block to progress in this matter and attempts should be made to overcome it by high officials who are in a position to exert influence on them. *Giving a more scientific and practical education to the sons of land-owners* ought also to go a long way towards breaking down the present indifference of the landlord class towards rural economics. It is within the power of *the Princes* to give a great push forward to the movement of agricultural reform and every legitimate means should be adopted to stimulate their interest in practical agriculture.

§15. The Veterinary Department:—The work of the Veterinary Department in reducing the incidence of disease and the appalling mortality among cattle must be briefly noticed. The number of cases treated at Veterinary Hospitals and Dispensaries and by itinerant officers is steadily on the increase, showing a gradually improving appreciation by the public of the valuable work being done by the Department. Not the least important work of the Veterinary Department is granting immunity against contagious diseases in infected areas by compulsory inoculations carried out with sera and vaccines and here also the tendency on the part of the cultivator to resent such action on the part of the Department is on the decline

* See *India in 1926-27*, pp. 134-135.

owing to a growing conviction about its utility. In Madras, prophylactic measures have been taken against rinderpest, the most serious cattle disease in India. In the same province, compulsory inoculation by the serum method has been legalized in villages notified by a District Magistrate.

✓ § 16 Reserve Capital:—As in other industries so in agriculture, some provision for unforeseen expenditure as well as by way of sinking fund and insurance is necessary, if agriculture is to be conducted, as it ought to be, on sound business principles. It is a common experience, especially in tracts of uncertain rainfall like the Bombay Deccan, that there is a regular cycle of good, bad and indifferent years. *Lack of any provision for meeting the more or less inevitable calamities like famines intensifies the suffering and distress resulting from them.* There is similarly an absence of any systematic arrangement for meeting the charges on unproductive mortgages or loans or in connection with depreciation of field improvements and implements. As Keatinge points out the sinking fund maintained for these various purposes need not be kept idle and in cash. It might be utilised for objects like cattle-breeding or planting of fuel trees, investments which could be liquidated whenever necessity should arise for doing so.

The principle of agricultural insurance has scarcely yet struck root in India. It is, however necessary to insure stacks of fodder, farm buildings, crops, cattle etc. Insurance is particularly needed in the case of fodder and cattle to insure against heavy recurrent losses due respectively to rick-burning and serious cattle mortality. It may be noted here that a promising beginning has been recently made, especially in Burma, in the direction of cattle insurance on a co-operative basis. Failing a regular sinking fund and insurance, for a general resort to which by the Indian farmer we will have to wait for a long time, the next best plan would be to encourage the cultivator to build a farm-house on his holding, "so that he may be on the spot to protect his property, to have a reserve of fodder, to make his cattle secure against famine, to have an enclosed pasture in which he may segregate them when contagious diseases occur, and to

* See Keatinge: *Rural Economy in the Bombay Deccan*, pp. 141-45.

have an irrigation well to serve as an insurance against unemployment in the dry season.”*

ORGANISATION.

§17. Importance of Rural Industries :—Agriculture is as much in need of organisation as any other business, but in India, it is at present in a very bad way as regards both internal and external organisation. Some of the serious short-comings in internal organisation such as the absence of economic holdings, permanent improvements etc. have already been discussed. The particular defect which we now propose to single out for special treatment relates to the *absence of subsidiary industries* to enable the farmer to distribute his labour more evenly throughout the year than is the case at present, and thus to improve his economic position. The absence of such industries constitutes a *source of great weakness* to the small holder in India who at present attempts the impossible feat of maintaining himself on his little holding without any supplementary sources of income to speak of.

There is an appalling amount of *waste of rural labour* on account of the seasonal character of the agricultural operations. Except in irrigated tracts, where it is possible for the cultivator “to sow something every month and to reap something every month and be always watering and weeding,” the average farmer does not get employment on his farm all the year round. *The duration of this enforced unemployment has been variously estimated from 150 days to 270 days in the year.* Mr. Edye, Census Officer for the United Provinces, writes in the Census Report of 1921, “The bulk of the population is agricultural, and agriculture here means ordinarily growing, harvesting and disposal of two crops in the year and not the mixed farming familiar in England. Agriculture of this kind involves very hard work for certain short periods—generally two sowings, two harvests, an occasional weeding in the rains, and three waterings in the cold weather,—and almost complete inactivity for the rest of the year. In precarious tracts, inactivity may be unavoidable for a whole

* Keatinge : op. cit. P. 145.

season, or even for a whole year. These periods of inactivity are, in the great majority of cases, spent in idleness." According to Dr. Slater, taking the land of South India all around, there is agricultural work for the cultivator only for five-twelfths of his possible working time. Mr. Jack in his *Economic life of a Bengal District* says, "The time-table of the cultivator.....when his land is unfit for jute, shows three months' hard work and nine months' idleness; if he grows jute as well as rice, he will have an additional six weeks' work in July and August." According to Keatinge, there are only 180 to 190 working days in the year in the Bombay Deccan; while according to Calvert, the work done by the average cultivator in the Punjab does not represent more than about 150 days' full labour.

In the absence of industries ancillary to agriculture, the Indian farmer looks upon the slack season as the time for recreation, marriage and litigation. Occasionally, he may accept temporary employment in a town factory or on Government public works or ply his cart for hire, and in the case of the last alternative he has now-a-days to reckon with the increasing competition of the motor truck. None of these usual occupations are altogether satisfactory from the agriculturist's point of view. As Mr. Darling points out, "The only way in which a small farmer can keep himself out of debt is by being frugal and industrious and by having a second string to his bow." This is the experience of the small holder all over the world. In Japan, the rearing of silk-worms is an important supplementary rural industry. France, Germany, Italy—all have their own rural industries. Moreover, agriculture in the West is of a mixed and varied character and gives employment to the farmer without any interruption. Dairy farming, pig-keeping and poultry-farming are the chief rural spare-time occupations. All this clearly shows that it is quite essential to supply the small farmer in India with some satisfactory spare-time occupations.

§ 18. Dairy-keeping etc.—Dairy-keeping is one of the possible subsidiary industries in India and if it could be successfully established it would not only improve the economic position of the ryot but also solve the problem of an adequate and pure milk-supply. The

problem is especially acute in the urban areas where the milk is adulterated by the mixture of highly injurious substances like boric acid, formalin etc. The milk is not only poor in quality but also very much dearer than in any other country in the world. Attempts to start dairies that have been made hitherto have failed almost without exception, firstly, owing to the poor milk-producing qualities of the indigenous cattle, which have deteriorated owing to the hard conditions of life they have to lead; secondly, owing to want of protection by legislation and thirdly, owing to want of encouragement by Government. Having regard to the fact that milk and its products are the best media possible for carrying bacteria and germs of typhoid, diphtheria etc, it is essential that production on honest and scientific lines should be made a financial success so as to ensure a safe and sure supply of milk to the public. Villages adjoining cities would be in a position to cater for the large demand that exists in the urban areas for milk of reliable quality at reasonable prices. Even in villages which are distant from towns and cities, there is scope for milk products being manufactured in a form, such as cream, ghee and butter, suitable for transport over large distances. Dairy-farming, however, if it is to be properly conducted involves careful attention to the quality of the animals so that the milk-yielding capacity should be increased. It is necessary by means of scientific breeding to produce good milkers and to breed out the disadvantageous characteristics produced by generations of starvation and by allowing promiscuous mating.* As Mr. Keatinge says, the subsidiary industry *par excellence* of the cultivator is the breeding and rearing of live-stock, which would provide occupation and an income at all seasons and return to the soil the manure which is necessary to maintain its productivity. There are difficulties in the way, such as crowding of the animals together with the men into the village houses where proper attention to the cattle is impossible. Existing circumstances such as scattered holdings and congested villages need to be modified in order that animal husbandry on

* See Evidence, Vol. I, P. 38-341, Agricultural Commission.
I. E....38

a commercial scale should be possible. Also, various difficulties in connection with adequate grazing facilities and fodder supply must be overcome.*

Apart from dairy-farming and cattle-breeding, the following rural industries may also be mentioned: poultry-keeping, fruit-growing, market-gardening, sericulture, lac-culture, bee-keeping, tanning, mat-making, bamboo and cane work, rope-making, pottery toy-making, wood-work etc.

It is obvious that not all these industries can be introduced all over India. In order to ascertain the possibility of introducing any of them in the different areas, a series of intensive regional surveys would be necessary. The special conditions of each district and village will have to be carefully studied and industries selected accordingly. Poultry-farming, for example, would be possible only in those parts where there is no strong religious repugnance to its pursuit as an occupation. A similar consideration would rule out bee-keeping, for example, in Gujarat where Jainism has a strong hold on the minds of the people. Poultry-farming and market-gardening would again require ready markets near at hand and could be introduced with advantage only in rural areas near towns. Sericulture requires special altitudes and climatic conditions.

§ 19. Economics of Khaddar:—Hand-spinning requires a somewhat more detailed treatment, not so much because of its intrinsic importance as because of the controversy which has raged in recent years round the Charkha and its possibilities. The advocates of the Charkha maintain that hand-spinning is the only supplementary industry possible and viable under the present conditions for the large masses in rural areas and affords the simplest and quickest means of utilising existing idle man-power. Mr. Gandhi, the great preacher of the gospel of the Charkha, summarises its advantages as follows:—†

1. It is immediately practicable, because (a) it does not require any capital or costly implements to put it into operation. Both the raw material and the implements for working it can be

* *Progress of Agriculture in Western India*, pp. 126-27.

† Richard B Gregg: *Economic Khaddar*, pp. 170-172.

cheaply and locally obtained; (b) it does not require any higher degree of skill or intelligence than the ignorant and poverty-stricken masses of India possess; (c) it requires so little physical exertion that even little children and old men can practise it and so contribute their mite to the family fund; (d) it does not require the ground to be prepared for its introduction afresh as the spinning tradition is still alive among the people.

2. It is universal and permanent, as next to food yarn alone can be sure of *always* commanding an unlimited and ready market at the very door-steps of the worker, and thus ensure a steady regular income to the impoverished agriculturist.

3. It is independent of monsoon conditions and so can be carried on even during famine times.

4. It is not opposed to the religious or social susceptibilities of the people.

5. It provides a most perfect and ready means of fighting famine.

6. It carries work to the very cottage of the peasant and thus prevents the disintegration of the family under economic distress.

7. It alone can restore some of the benefits of the village communities of India now well-nigh ruined.

8. It is the backbone as much of the hand weaver as of the agriculturist, as it alone can provide a permanent and stable basis for the handloom industry which at present is supporting from 8 to 19 million people and supplies about one-third of the clothing requirements of India.

9. Its revival would give a phillip to a host of cognate and allied village occupations and thus rescue the villages from the state of decay into which they have fallen.

10. It alone can insure the equitable distribution of wealth among the millions of inhabitants of India.

11. It alone effectively solves the problem of unemployment, not only the partial unemployment of the agriculturist, but of the educated youth aimlessly wandering in search of occupation. The very magnitude of the task requires the marshalling of all the intellectual forces of the country to guide and direct the movement.

Mr. C. Rajagopalachari writing on the 'Charkha' in his Memorandum submitted to the Royal Commission on Agriculture says, "*Hand-spinning is the only occupation that can fill the spare hours of the rural population if we take into account the limited skill and knowledge of the people and the necessary conditions of any spare time occupation, namely, that it should be simple, easily learnt, and capable of being taken up and put aside any time so that it may not interfere with the main occupation.*" This conclusion, he says, is confirmed by actual experience in the Khaddar revival work in the Tamil Nad in the Madras Presidency. People there, especially women have taken kindly to the Charkha and their supplementary earnings, small as they are, ranging from Rs. 15 to 25 per Charkha annually, are a useful addition to their income especially as, in not a few cases, the income from land itself is no more than about Rs. 50 per family per year. Similarly, Messrs. Puntambekar and Waradachari in their excellent essay on Hand-spinning and Weaving maintain that the Charkha has a great future before it and is capable of effectively supplementing the existing mill-production so as to provide clothing to the whole population on an adequate scale, if only a suitable organization on decentralised lines is called into existence for this purpose. There are, however, *two main difficulties* admitted even by fervent advocates of Khadi like Rajagopalachari, viz., (i) *the taste that has been created for fine fabrics* and (ii) *the greater cost of handspun cloth as compared to that of mill-products, especially those imported from abroad*. He holds that the second is the greater of the two difficulties and suggests that a state bounty should be given so as to help production and make possible reduction of prices, and maintains that this will be necessary only for some time pending an increase in the general prosperity and purchasing power of the poorest classes through the recurring annual savings. He also recommends other methods of state help such as loans of capital and facilities for production and distribution, reduced freights and preferential treatment in octroi and other taxes. We cannot agree, however, that "the increase in the purchasing power of the poorest classes", even assuming it can come so easily, will induce them to buy Khaddar in preference to the cheaper mill-made cloth. Unless

Khaddar sells as cheaply or cheaper than mill-made cloth, a permanent system of artificial props in the shape of bounties will have to be maintained at the expense of the general tax-payer. In his preliminary report, the special officer appointed by the Madras Government to carry out a survey of cottage industries, emphasising the limitations of the Khaddar movement in the Presidency, arrives at the conclusion that the annual savings are not adequate enough to hold out any large inducement to hand-spinning. These difficulties are real, and apart from the question of cost, it is not easy to change peoples' psychology and preference for "cooler and more attractive substitutes for the coarse Khaddar which lie within the reach of all but the very poorest." However, so long as the farmer is not and cannot be supplied with any other more remunerative supplementary industry, hand-spinning offers him some chance of balancing his budget at the end of the year. *The case for the Charkha is merely this, that spinning on the Charkha is better than doing nothing whatever. But a more remunerative subsidiary industry is required for bringing substantial economic relief to the cultivator.*

§ 20. Some other rural industries—Another way to tackle rural unemployment is to promote the establishment, in rural areas, of industries connected with the preparation of agricultural produce for consumption and export such as cotton ginning, decortication of ground-nuts, rice-milling and husking, manufacture of refined sugar, oil-pressing, manufacture of bone manure etc. These industries should as far as possible be organised on co-operative lines and should not be concentrated in towns so as to provide wide-spread rural employment. The supply of cheap electric power would be a great facility for the development of such industries connected with agriculture. The Punjab and Bombay offer a promising field for the establishment of hydro-electric works for the distribution of cheap power in rural areas. A suitable system of technical education is a *sine qua non* for success. State-aid to these industries will also be necessary, at least in the beginning.

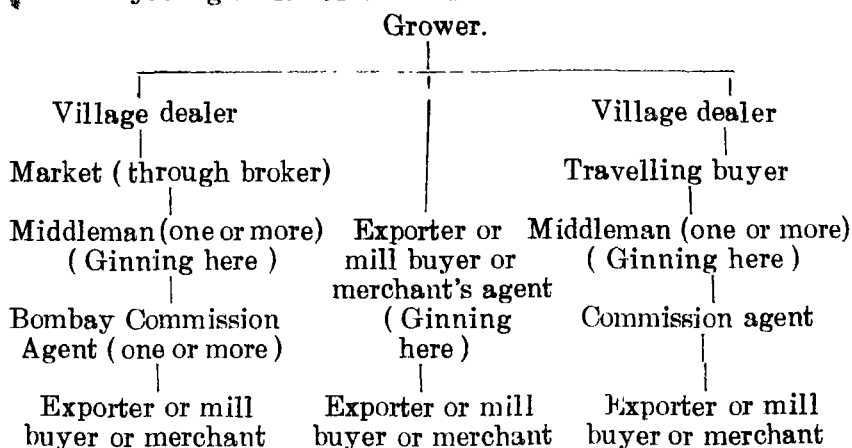
§ 21. Marketing : Co-operative sale:—So long as the Indian farmer was practising subsistence husbandry and enjoying the protection of the old village organization, perhaps no further

and special organization was necessary in rural areas, but to-day the conditions are altogether different. While the commercialisation of agriculture and the establishment of wide and competitive markets has made a stronger organisation necessary, even the old archaic organisation has been so weakened that it has ceased to be serviceable and the ryot is left without any guidance or protection to face an altogether novel situation. As Mr. Darling remarks, the farmer "must be organised to meet on terms of equality organised money-lenders, traders and merchants lest these should fleece him and deprive him of the gains of the new system of agriculture." †

It is a common experience everywhere that the producer of raw materials generally fails to get his fair share of the good things of the world, and this is particularly the case at the present time in India where farming is carried on by small units unassisted, as we have observed, by the presence of any special organisation for their protection. The Indian cultivator is normally dependent on the money-lender to whom his crops are often mortgaged in advance. *Besides the money-lender, there are a number of professional dealers and middlemen who attach themselves at every point and create a comfortable corner of nourishment for themselves at the expense of the cultivator.* A further handicap is an inadequate provision of roads, bridges and feeder railways to enable the agriculturist to deal directly with the consumers or wholesale dealers. Under these circumstances, it is not surprising that the cultivator does not get a fair price for his produce. He is compelled to sell his product at a disadvantage at a time when everybody is selling and the market is glutted, owing to his chronic shortage of capital and the need for satisfying the demands of the Sahukar and of Government land revenue. There is a long chain of middlemen, especially in the case of staples of export. Large firms often enter into forward contracts with the cultivator to whom advances of money are given in anticipation of the delivery of produce. As a typical example of the multiplicity of middlemen who intervene between the cultivator and the consumer, the following diagram may be reproduced from the

† *The Punjab Peasant.*

Memorandum submitted by the Indian Central Cotton Committee to the Royal Agricultural Commission.*



As the Memorandum goes on to remark the possible variations are obviously extremely numerous and the number of intervening middlemen may be very high. But even if we put aside extreme cases, there are usually too many intermediaries between the agriculturist and the consumer, such as the agriculturist's local agent, the mofussil purchaser's agent, mofussil purchaser and retail purchaser. And as Mr. V. L. Mehta points out in his Memorandum, it would be possible to eliminate these intermediaries by the adoption of the co-operative method. A co-operative sale society for example, may dispense with the local agent and the mofussil purchaser's agent and make direct dealings with the mofussil purchaser possible. Not only this, but if there are efficient consumers' societies at the centre all the intermediaries may be eliminated to the very great advantage of both producer and consumer.† *Co-operation offers the only satisfactory solution for enabling the agriculturist to realise the full market price for his produce.* The agriculturist sometimes deals directly with the consumer, but as each cultivator acts for himself a disproportionate amount of time and energy is necessarily involved in taking the produce over considerable distances and disposing of it in small quantities.

* Evidence, Vol. II, Part II, p. 21.

† See V. L. Mehta's Memorandum, Evidence, Vol II. Part II, p. 110.

The movement for co-operative organisation in the sphere of marketing has already made some headway in India. Burma led the way by inaugurating *joint paddy sale societies*. But the most promising development has been in the sale of cotton in provinces like Bombay. *Co-operative Cotton Sale Societies* have been started in Bombay, Central Provinces and Punjab. The Movement has so far achieved the most considerable success in the Bombay Presidency where there are four principal areas in which cotton sale societies are situated, (i) Dharwar and Belgaum; (ii) Bijapur; (iii) Surat, Broach and Kaira; (iv) Khandesh; those in the first and third areas being the most important. In 1926-27, there were in all 31 Cotton Sale Societies whose transactions were valued at about 42 lakhs of rupees.* Several different types of organisation are being given a trial to at present:—(i) Societies which pool their members' produce, arrange for ginning and sell ginned (and baled) cotton; (ii) Societies which organise periodical auction sales of graded *kapas*,—the sales being on individual account; (iii) Co-operative Commission Shops which provide storage so that the grower is not obliged to sell on an unfavourable day. Such societies are being tried in the Punjab: and (iv) Co-operative ginning and sale of members' cotton by Seed Unions. These societies are mainly organised for the production of pure seed and can scarcely be regarded as touching the real question of cotton marketing. The first type is the only one which makes a serious attempt to dispense with the small middleman altogether and has attained some measure of success in the Surat District; while the second type is in operation mainly in the Dharwar District with Gadag and Hubli as the prominent centres.

When all is said and done, however, the progress of co-operative marketing organisation even in its most remarkable development *viz.*, in cotton, has not been very rapid, nor has it been unattended entirely by serious defects, such as inefficiency of management, absence of hold on the members who cannot be legally forced to sell their cotton through the societies and inadequate finance, especially hindering prompt advances of money to growers. All these defects must be removed and the movement must be highly

* See the Annual Report on the working of Co-operative Societies, Bombay, 1926-27, pp. 22-25.

organised and skilfully worked in order to be able to fight against the powerful vested interests of *Dalals*, *Adtyas* and other middlemen.*

The principle of co-operative sale has been extended to other agricultural products like Gur, tobacco, chillies, paddy, and potatoes and there is a fairly efficient organisation for the sale of Gur, especially in the canal areas in the Bombay Presidency. Experiments are being made in Bengal in the co-operative sale of jute and the movement has great possibilities. There are about a dozen societies in working order and they have a common selling agency, viz., the Calcutta Wholesale Society. Jute is bought outright from the ryots either directly or through *Beparis*, paid and financed by the society concerned and subsequently delivered, either to a Calcutta mill or to an export firm, to whom it has been sold through the Co-operative Wholesale Society.†

§ 22. Other improvements in the marketing organisation:— Modern industry requires that consignments should be up to sample and uniform from year to year and unless these conditions are satisfied, large-scale marketing for distant customers cannot be satisfactorily conducted to the fullest possible advantage of the primary producer. *At present, various abuses exist such as damping and admixture, not only on the threshing floor but also in the go-downs of brokers and dealers.* Legislation has been felt to be necessary in order to prevent these malpractices. As we have already mentioned, at the instance of the Indian Central Committee, the *Cotton Transport Act* and the *Cotton Ginning and Pressing Factories Act* have been passed in 1923 and 1925 respectively. Under the former Act, (which now applies to the most important staple cotton areas of Bombay and Madras Presidency and of the Baroda, Rajpipla and Indore States), the Provincial Government is enabled to notify definite areas of cotton for protection and to prevent the importation of cotton from outside these areas except under licence. This is aimed against the practice of importing inferior cottons for purposes of adulteration which had resulted

* See Agricultural Commission, Evidence, Vol II, Part II, pp, 22-31.

† See Indian Journal of Economics, January 1928, H Sinha's Paper on Co-operative Marketing.

CHAPTER IX

AGRICULTURE (continued): RURAL INDEBTEDNESS.

§ 1. Rural indebtedness a serious problem:—Owing to her fertile soil, abundance of labour and considerable inherited agricultural skill, India seems to be marked out for a prosperous agricultural country. And yet, as we have repeatedly remarked, Indian agriculture is in a very backward condition and the lot of the average cultivator in India is not far removed from utter destitution. The existence of crushing debt is universally acknowledged to be one of the main causes of this state of affairs. As Mr. Wolff puts it, "The country is in the grip of the Mahajan. It is the bonds of debt that shackle agriculture."^{*} The presence of a huge volume of indebtedness, which is for the most part unproductive, exhibits improvement in every direction and constitutes one of the most serious problems of agricultural economy in India.

§ 2. Extent of Indebtedness:—Though no comprehensive estimate for the country as a whole has so far been attempted, some idea of the extent of the serious embarrassment through debt is conveyed even by the results of the somewhat sporadic and limited inquiries undertaken from time to time.

In 1875, the Deccan Riots Commission analysing the situation in twelve villages in the Ahmednagar district (Bombay), came to the conclusion that one-third of the occupants of the Government (?) land were embarrassed with debts, that these debts averaged about eighteen times their assessment, that two-thirds of the debt was secured by mortgage of land and that the average debt per occupant amounted to Rs. 371.

The Famine Commission of 1880 inferred from evidence collected from all parts of India that one-third of the landholding classes were deeply and inextricably in debt and that at least

^{*} *Co-operation in India*, p. 3.

an equal proportion, although in debt, were not so beyond the power of recovering themselves.

The Famine Commission of 1901 came to the conclusion that one-fourth of the Bombay cultivators had lost possession of their lands, less than one-fifth of them were free from debt and the remainder were indebted to a greater or less extent.

In 1895, *Sir Frederick Nicholson* estimated the total rural debt of Madras at Rs. 45 crores. *Sir Edward Maclagan* calculated in 1911, the total agricultural debt of British India to be about Rs. 300 crores on the basis of Nicholson's estimate for Madras. *Mr. Darling*, preferring the Punjab figure (Rs. 90 crores) of 1924 as a more reliable basis than the Madras figure of about thirty years ago, arrives at the figure of Rs. 600 crores for British India. "The Punjab figure is 24 times the land revenue of the Province. Applying this multiple to the land revenue of British India (Rs. 35.45 crores in 1923-24 including Burma) we get a debt of Rs. 674 crores. There is, however, reason to believe that the Punjab is more highly indebted than most other parts of rural India. Various things suggest this, for instance, the comparative tables (given below)§; the

§ Comparison of rural debt in the Punjab to that in other Provinces. Darling: op. cit. pp. 6 and 7:—

(i) Percentage free of debt.	Percentage free of debt,
1874, Central Provinces	60
1888, The Tenantry in the Agra district	22
1894, Nagpur (18,000 tenants)	40
1901, Baroda State	40 (of all landowners).
1907, Faridpur (Bengal)	55 (of all cultivators).
1919, Mysore State (24,350 co-operators)	37
1924, Punjab (Darling's inquiry)	17
(ii) Average debt.	Average debt
1875, 12 villages in Ahmednagar (Deccan Riots Commission)	371 per occupant
1907, Faridpur District, (Major Jack's Inquiry)	121 per indebted cultivator.
1913, Baroda State (Baroda Durbar's Inquiry)	450 per indebted holding.
1917, Pimpal Soudagar Village (Deccan, Dr. Mann's Inquiry)	255 per indebted family.
1918, Ajmer-Merwara (10, 779 co-operators)	379 per co-operator
1919, Bengal (4000 co-operotors)	120 " "
1919, Mysore (24,350 co-operators)	273 per indebted co-operator.
1924, Punjab (Darling's Inquiry)	463 per indebted proprietor.

number of money-lenders, which in proportion to population is three times as great in the Punjab as in the rest of British India, and the special legislation that has had to be passed to protect the cultivator against the money-lender. Instead, therefore, of taking the multiple of 19, it will be safer to take one of 17. This gives a total of 603 crores. The amount is probably higher, as, wherever there is a Permanent Settlement, land revenue is on a much lower scale than elsewhere: nor does the land revenue figure taken for British India include land revenue enjoyed by assignees, though it does in the case of the Punjab. Further, if we apply the Punjab figure in terms of population, we get a total of 1,080 crores, for the rural population of Punjab is only one twelfth of that of British India. Very tentatively, therefore, we may say that the total rural debt of British India, with its population of 247 millions, is not less than 600 crores or £400 millions".*

The seriousness of the debt, however, does not lie in its volume, which in itself is neither alarming considering the size of the country nor is it unparalleled in other countries. *What gives cause for uneasiness is that the greater part of the debt is unproductive.*† And as Mr. Darling remarks, one of the disadvantages of unproductive debt is that it tends to increase automatically. Productive debt by fertilising the soil creates its own means of repayment, but unproductive debt is apt to be repaid with difficulty.‡

§ 3. The causes of indebtedness:—If indebtedness is a cause of poverty, the reverse also is equally true. It is, therefore, to be expected that much of what is advanced in explanation of the indebtedness also explains the poverty of the rural masses in India. Bearing this in mind, we may now proceed to enumerate

* Darling, *The Punjab Peasant in Prosperity and Debt*, pp. 17-18.

† Darling asserts that less than 5 per cent of the debt in the Punjab is due to land improvement and that if the whole of it were to be made available for agriculture, it would be amply sufficient for that purpose on the existing basis of agricultural practice. What is true of the Punjab is true more or less of most of the other provinces also.

‡ See Darling, *op. cit.* pp. 18-19.

the causes of rural indebtedness at home, so we first meet old friends such as:—

- ✕ (i) *excessive pressure of the population on the land;*
- ✕ (ii) *excessive subdivision and fragmentation of the soil;*
- ✕ (iii) *absence of supplementary industries;*
- ✕ (iv) *We have already referred to the ill-health of the ryot at certain seasons due to the prevalence of diseases such as malaria, putting him out of action when his labour is most needed, and generally lowering his efficiency.*
- ✕ (v) *The insecurity of the harvests—a feature which has justified the description of Indian agriculture as a game of chance with the monsoon, which as Mr. Darling remarks, "has all the caprice of the Eastern potentate." It has been calculated that the agricultural cycle of five years gives one good year, one bad, and three that are neither good nor bad. It is only in good years that the peasant can possibly keep himself out of debt. §*
- ✕ (vi) *The loss of cattle due to famine and disease, and the prevalence of pest is another obvious cause of the economic embarrassment of the cultivator, as evidenced by the large percentage of loans given by the co-operative societies for the purchase of cattle.*
- ✕ (vii) *A further cause is the love of litigation characteristic of the Indian ryot. We may admit that this is not an ineradicable defect of character and is amenable to treatment and cure by better education. But in the meanwhile, we must realise that it is an active factor tending to increase the ryot's financial embarrassments.*
- ✕ (viii) *The improvidence and extravagance of the ryot. It is possible to explain the improvidence and extravagance of the ryot by attributing them to the tyranny of social customs connected with marriage and other domestic ceremonies, to the lack of education and the speculative character of his investments, which endows him with the mentalities of a gambler. It is not possible to deny their existence as causes of aggravating indebtedness. The ryot, who is normally lives a most frugal life.*

§ See Darling, op. cit. pp

apt to carry his expenditure on special occasions to extravagant limits, considering his resources. The Deccan Riots Commission do not, however, think that extravagant expenditure on marriages is a primary cause of indebtedness. Let us quote their words:- "It would be wrong to say that improvidence does not exist as a cause of indebtedness. It consists, however, rather in the short-sighted imprudence of a ignorant class ready to relieve present necessity by discounting future income on any terms and unable to realise the consequences of obligations foolishly contracted, than in an excessive expenditure or misapplication of income..... Undoubtedly there has been given to the expenditure on marriage and festivals as a cause of the ryot's indebtedness. The expenditure on such occasions may undoubtedly be called extravagant when compared with the ryot's means, but the occasions are few and probably in a course of years the total sum spent in this way by any ryot is not larger than a man in his position is justified in spending on social and domestic pleasures. This expenditure forms an item of some importance on the debit side of the account but by itself it rarely appears as a nucleus of his indebtedness. The sums usually spent on such occasions have probably been overestimated or the operation of other causes in producing debt has been overlooked.....The constantly recurring small items of debt for food and other necessities, for seed, for bullocks, for the Government assessment do more to swell the indebtedness of the ryot than an occasional marriage."

We do not fully concur with this opinion and are inclined to the view that expenditure on marriage and social and religious ceremonies is one of the most important causes of debt. There are numerous instances of heavy debts having been contracted on occasions from which the borrower has never been able to free himself. Moreover, the standard of expenditure on such occasions in rural areas has latterly been distinctly on

Deccan Riots Commission express-
existing indebtedness was
father to son, generation
to generation restrictions.

alarming scale, from the ryot to the Sahukar and especially in Bombay and Punjab, the peasant proprietary tenure began to degenerate into a "Marwari tenure" and the "cultivator capitalist" began rapidly to evolve into the "Sahukar's Serf."*

The expropriation of the cultivator by the money-lender generated agrarian discontent and hatred of the money-lender which eventuated in murderous uprisings of the exasperated peasants such as the Sonthal Rebellion (1855), the Deccan Riots (1874), and those of Ajmer (1891).

*In defence of the money-lender:—*From the above description of the money-lender, we must not allow ourselves to infer that he is an unnatural monster of cruelty and inhumanity. He shares the weaknesses as well as the virtues of ordinary human beings, though the conditions of the peasantry amongst whom his lot is cast are such as to call his weaknesses more than his virtues into action. The risks he undertakes are many and great owing to the ignorance, improvidence and irregularity of the cultivators and, therefore, the high interest he charges is largely an insurance against them. The unpopularity of his calling must also be allowed for.† Further, there being no other security for his capital

* Sir Thoms Hope in his speech introducing the Indian Agriculturists' Relief Act in 1872, gave the following description of the money-lender's malpractices. "That the money lenders do often take bonds on false promises; enter in them sums larger than agreed upon; exact extortionate promises; give no receipt for payments and then demand more credit produce at fraudulent prices; retain liquidated bonds and securities; use threats and warrants of imprisonment to extort fresh bonds from debtors advanced; charge interest unstipulated for, over-calculated or in violation of Hindu Law and commit a score of other rogueries—These facts proved by evidence so overwhelming that I scarcely know what is the extent of the five volumes comprising the Report of the Commission."

† There is very little chance that the odium attaching to the money-lender's calling can be lessened by an improvement in the public opinion so long as the science of the ryot's position and the irresistible temptation felt by the peasant to exploit it remain abiding factors. The only escape from this fatal part as it is undeserved, would come by the interposition between the peasant and the borrowing ryot of corporate organisations such as credit Societies, Land Banks etc. From many points of view, a system under which capital is provided "in small sums by

* Fa— so men of small commercial intelligence" needs to be

† Da

money-lending is the only use he can make of it. *The need of the agriculturist for loans is imperative and the money-lender is the only person to satisfy it.* If, under these circumstances, he often drives hard bargains and abuses the great power he enjoys, this is only human nature. "To censure him is to censure the imperfections of mankind. We should rather blame the system than the man it has moulded."

Until a better system of credit fully meeting rural needs is evolved, the money-lender cannot be dispensed with. While trying to curb the money-lender in every possible way, whenever his dealings appear to take an undue advantage of the necessitous position of the cultivator, we must not be blind to the useful part he plays at present in the rural economy. The money-lender is the only oasis of thrift in a desert of improvidence and extravagance, and is the very foundation of the simple system of Indian rural economy supplying capital for all the needs of the village. He serves the village also in a variety of other ways than as supplier of credit. He is, e. g., usually also a grain dealer, and is in this capacity particularly useful in times of famine and drought, when he issues grain and helps the village to tide over difficult times. "Down with the money-lender" would, therefore, be a silly battle-cry. Even under any conceivable scheme of rural credit, such as the Co-operative Credit Societies or Land Mortgage Banks, it would be an advantage to make the money-lender an integral part of the credit institutions and to induce him to make his capital available to the new credit organisations, in order that the capital needs of the rural community should be properly satisfied.

(a) Revenue policy and indebtedness:- There are some who like Mr. R. C. Dutt regard the heaviness of the land tax together with the rigidity of its collection as one of the causes of rural indebtedness. They contend that there has been an increase in the amount of land revenue collected during the last fifty years or so, in spite of many years of famine or partial failure of crops and the diminishing yield of land in many parts of the country. The Famine Commission of 1901 seems to express the view that the heavy land tax is a serious cause of rural indebtedness.

* Darling, op. cit. p. 228.

this view when they say, "In good years the cultivator has nothing to hope for except bare subsistence and in bad years he falls on public charity". The *Famine Commission of 1880*, on the other hand, make the following observation in this connection, "The fact that landowners, who have no land revenue or only a light quit-rent to pay, are often also deeply embarrassed proves that the payment of the land revenue is not the main cause of the debt. If a man spends all his income on himself and borrows to pay his rent or taxes, it can hardly be said that his indebtedness is due to the fact of his having rent and taxes to pay, when these charges bear so light a proportion to income as the land revenue does to the gross outturn of the land."* The ryot often borrows for paying government assessment. But Land Revenue cannot for this reason alone be called a cause of indebtedness any more than seed and food for which also the ryot may have to borrow.

It would, however, be quite fair to attribute the condition of indebtedness to Land Revenue, if and when it can be shown to have operated oppressively, either by reason of the heaviness of the levy or of lack of elasticity in its collection. That the Land Revenue system has sometimes erred in these directions is admitted even by those who are not prepared to concede that rural indebtedness is to any extent chargeable to the land tax. Talking of the Punjab, for example, Mr. Darling admits that "although with the advent of British rule the Land Revenue demand was lowered and converted from kind to cash, it was not at first lowered enough to suit the less elastic system of collection"† He goes on to remark, however, that "this aggravated indebtedness, but Land Revenue can hardly be considered as an original cause of debt." *But this is a distinction without a difference.* The distinction between original and aggravating cause does not appear to be scientific. What we want to know is whether an alleged cause is a real cause. A person may be already burdened, say, with ancestral debt and he may aggravate his indebtedness by borrowing for extravagant expenditure on a marriage ceremony, but this should

* Famine Commission's Report 1880, p. 132.

† Darling Op. cit. p. 248.

not ~~debar~~ one from describing the expenditure on marriage ceremony as a true cause of indebtedness. All borrowing which is due to the cussedness of the party concerned i. e. the ryot or of outsiders such as the *unscrupulous Sahukar* or occasionally *Government themselves*, whenever their *Land Revenue policy* is *unduly harsh*, must be regarded as a cause of indebtedness. Further, it is argued that the reduction of Land Revenue would not reduce debt because "every blessing is neutralised in this country by an increase of population."[¶] Now this may or may not be a good reason for reducing the burden of assessment, but it certainly does not afford a valid ground for holding that heavy assessment cannot be considered a cause of debt. The argument we are criticizing does not really deny that the Land Revenue may be a cause of indebtedness; it merely suggests that if it is removed another cause viz., increase of population will supervene. Unrestricted breeding may neutralise the beneficial effect of the abolition of an oppressive system of taxation, as indeed it may neutralise the effect of the removal of any abuse whatsoever, but this does not prove that a heavy land tax is not a *vera causa* of indebtedness. *There have been periods during which it has by universal acknowledgement been excessive*, e. g., in the Deccan so long as the Pringle Settlement was in force. Again, in working the system of suspensions and remissions, a proper understanding of the ryot's position has not always been displayed. Even at the present time, in spite of numerous amendments and improvements which the Land Revenue system as a whole has undergone, *individual cases of unduly harsh treatment* for which there is no effective system of obtaining redress, can still be shown to occur.

In so far as these defects have been present in the past and still persist, it is not unreasonable to include them amongst the causes of indebtedness. However, we must admit that, in the main, *the Land Revenue System* as at present in operation is fairly equitable and tending continuously to improve, and we find no reason for quarrelling with the view that, in so far as it is still open to criticism, it is only a minor cause of indebtedness and that its existing deficiencies dwindle into comparative insignificance

¶ Darling, op. cit. p. 250.

side by side with some of the more serious causes of indebtedness we have discussed above.

§ 4. State Policy regarding Rural Indebtedness:—We have so far discussed the cause of agrarian indebtedness. We may now review the measures adopted by the Government to tackle this problem which was forced on public attention in the early seventies of the last century. The question was discussed from time to time by the Deccan Riots Commission and the Famine Commissions of 1880 and 1901 and formed the staple of the debates and despatches on the Deccan Agriculturists' Relief Bill (1878), on the Tagavi Loans Acts (1882-83), the Agricultural Bank scheme (1884), Nicholson's Report (1897), the Punjab Land Alienation Bill (1899) and the Co-operative Credit Societies' Bill (1903)*

Sir Edward Maclagan in his Note on Agricultural Indebtedness in India, classifies the measures taken by Government under four heads as follows:— (i) Measures taken to encourage the avoidance of unnecessary debts; (ii) measures for the improvement of the Civil Law in connection with agricultural debts; (iii) measures for restricting the alienation of land; and (iv) measures undertaken with the object of providing or maintaining credit or reducing debt.

§ 5. Measures to avoid unnecessary debts:—Under this heading we may mention efforts made to popularise primary education in rural areas to enable the ryots to take a more business-like view of their indebtedness and to meet the money-lender on a more equal footing. Education, however, remains woefully deficient both as regards quantity and quality. All the other measures taken by Government to increase the resources of the agriculturist may logically appear under this heading, but a good many of them have already been discussed in previous chapters. The suspensions and remissions of assessment in years of scarcity have also been granted as partial remedies. But the system needs to be more liberally administered in order adequately to fulfill the purpose for which it is meant. *Village Post-office Savings*

* Consult Selections from Official Documents on Agricultural Indebtedness by S. C. Ray, Calcutta University.

Banks have been started to inculcate habits of saving and thrift among the people. But these facilities need to be far more widely extended than at present to produce an appreciable effect in promoting thrift and in gathering together the little savings of the ryot for fruitful employment.

§ 6. Measures for the improvements of the Civil Law:—As we have already seen, the original policy of laissez-faire by Government had to be abandoned as it unduly disturbed the old balance between creditor and debtor; and it was found necessary to “take back many of the weapons inconsiderately placed in the money-lender’s hand and shown to have been misused.....and to substitute for the blind and ruthless operation of legal machinery, the intelligent dispensation of justice between man and man”†. In achieving this object, however, it is of the utmost importance as well as difficulty to *guard against the possibility of violent interference with the legitimate business of the rural banker leading to a disastrous contraction of credit.* The Sahukar far from being hindered should be actually assisted by law in recovering his reasonable claims. The ryot, on the other hand, should be protected from extortion and oppression but at the same time should be constrained to pay his just debts to the full extent of his means. For protecting the ryot several alterations were made in the Code of Civil Procedure in the matter of executing decrees against agriculturists, such as exemption of agricultural tools and implements and cattle necessary for tillage and the materials of the agriculturist’s house from attachment or sale; the agriculturist debtor was also exempted from arrest for a decree of the Court and was given the concession of repayment of his debts by instalments.

The Deccan Agriculturists’ Relief Act of 1879 was passed

* It may be readily granted that the changes which have come with the advent of British rule, such as better defined rights of property, a more complete recognition of the force of contracts and a stricter enforcement of them through the Civil Courts are all marks of a transition from a less to a more advanced social organisation. But so far as most of the cultivators were concerned, these changes were immediately disastrous for them as they were not sufficiently advanced either as regards education or economic condition to benefit by them.

† Speech of Sir T. Hope in the Governor-General’s Council on the Deccan Agriculturists’ Relief Bill 1879.

on the recommendations of the Deccan Riots Commission of 1875 appointed to inquire into the riots in certain districts of the Deccan, a feature of which was a violent attack on the money-lenders by their oppressed debtors. The Act allowed the Courts to go behind the contract and to modify it in favour of the agriculturist so as to reduce an oppressive rate of interest, to prevent sale of land unless specifically pledged and to restore the land to the cultivator even when there was a sale deed between the two parties. It made it obligatory on the creditors to furnish account and grant receipts and required mortgages by agriculturists to be in writing. The period of limitation, which since 1859 had been three years only, was extended in the case of suits against the agriculturists to twelve years, if the suit was based on registered deed and six years otherwise. *Though the Act was well-intentioned it has, on the whole, been found ineffective and even positively injurious.* It has increased litigation and disturbed the structure of normal credit by introducing extreme uncertainty into the transactions between Ryots and Sahukars; it has led to an abuse of the concessions by the cultivators and made the money-lender more careful and exacting in his dealings with them thus increasing the difficulty of borrowing. According to the Famine Commission of 1901, there was positively room for holding that transfer of property both by sale and mortgage had become more frequent since the Act was passed. A recent Bombay Committee has, therefore, suggested radical changes in the Act so as to make it workable and beneficial to the agriculturists.*

As another instance of the alteration of the Civil Law may be mentioned the Act of 1899 by which certain changes were made in the Contract Act and the scope of the term 'undue influence' was extended so as to cover all cases in which unfair advantage was taken of his dominating position by the Sahukar. Where the transaction was apparently unconscionable, the burden of proving absence of undue influence was thrown on the money-lender. The Usurious Loans Act as consolidated and amended in 1918 aims at determining the legal and maximum amount of interest recoverable, redu-

* See also the Memorandum by Mr. K. S. Gupte, submitted to the Agricultural Commission, Bombay Evidence

cing the rate of interest chargeable and fixing a maximum rate of interest. The success of the Act, however, is doubtful, for as *Mr. Wolff observes, anti-usury legislation has always failed in all countries and can never grapple with the evil of usury.

§ 1. Restrictions on the transfer of land:—Almost everywhere in India, "proprietary" and "tenant rights" had greatly increased in value during the last forty or fifty years of the 19th century causing an *unprecedented expansion of the peasant's credit* which was for the most part misused. *No precautions were taken to prevent an ignorant and unthrifty peasant from borrowing recklessly on the strength of the improved security, to him which began to pass rapidly out of the hands of the cultivator and far from desiring to prevent transfer of land, Government at first actually to welcome it.* It was thought that the facility of transfer would result in land coming into the possession of cultivators with sufficient resources to exploit it fully. The authors of the Joint Report in Bombay, e. g., wished special measures to be adopted for facilitating transfers, more especially as the customs of the country were adverse to them. The realisation, however, gradually dawned on Government that transfer of land to non-cultivating classes had reached a stage at which it was economically as well as politically dangerous and that it was therefore necessary to restrict free alienation. Those who favoured legal restriction on free transfers of land desired it primarily for preventing the passage of land into the hands of the non-cultivating classes, though they also welcomed the secondary effect of such restriction, viz., decrease of credit, as likely to diminish the rate at which debt was being contracted by the peasant class. Action was taken or contemplated in one form or another, the most outstanding case being that of the Punjab. Under the *Punjab Land Alienation Act of 1901*, non-agricultural classes are not allowed to buy land from a member of an agricultural tribe nor to take it in mortgage for more than twenty years. The success of the Act in preventing the expropriation of the peasant proprietor by the money-lender is undoubted. There is, however, a fly, or rather several flies, in the ointment. In the first place, the difficulty

*Wolff: *Co-operation in India*.

placed in the way of the educated townsman wishing to bring his capital, intelligence and enterprise to bear on the land is a handicap to agricultural progress. Such enlightened enterprise has been the principal cause of the progressive character of English agriculture. Even the agriculturist classes have suffered from the inevitable contraction of credit. Another serious and unexpected evil has been the emergence and the growth of influence of the agriculturist money-lender, to whom the restrictions of the Act do not apply and who takes advantage of his privileged position for expropriating his brother agriculturist in a manner as unscrupulous as that of the old money-lender. While, therefore, the Act has helped materially the retention of land in the hands of agriculturists, it is open to doubt whether it has appreciably diminished the evil of indebtedness.*

§ 8. The supply of money and credit:—*Grant of loans to ryots*:—The Tagavi loans are a very old form of state help to the ryots in India and the British Government, who inherited the system as a legacy from former Governments, realised the necessity of providing credit for financing agricultural operations. It passed several Tagavi Acts in 1871, 1876 and 1879, respectively but no active action was taken until after the passing of the Land Improvement Loans Act of 1883 and the Agriculturists Loans Act of 1884 as recommended by the Famine Commission of 1880. Under the former Act, long-term loans for permanent improvements on land such as wells and embankments were to be granted; while under the latter, short-term loans for current agricultural needs, such as the purchase of seed, cattle, manure, implements etc. These loans have been useful to the agriculturists, especially at critical times, when they have helped to mitigate the prevalent rates of interest and have served in some measure to establish a connection between the village and the wider money-market from which Government often borrow for this purpose.

Tagavi loans, however, have never been popular. The Irrigation Commission Jhausi, stated the total amount so lent at 6 crores of rupees. Credit:—taken ly on up in the ocean. These loans are granted only for special nes thses so that the ryot, rather than of Cr sale

* See Darling: op. cit. lar/-90 and 229-231.

imperil his credit with the money-lender from whom he can borrow for all purposes, prefers not to avail himself of the state loans unless absolutely forced to. The rigidity in the matter of collection is another disability which makes the Tagavi unpopular. The endless delays in distribution and the exactions of petty official underlings and the general red-tape character of the Revenue agency by whom they are administered are further serious drawbacks. The system is also extraordinarily difficult to supervise and does not go to the root of the matter in that it fails to exercise any educative influence on the character of the ryots; in fact it tends to demoralise them. Lastly, Government's credit and resources being limited, funds cannot be made available to the extent required.* As a general means of financing agriculture the system is a failure, although in respect of specified famine tracts and backward areas it has a limited use.† Government are waking up to the necessity of amending the administration of the Tagavi Loans so as to derive from them such advantages as they are capable of yielding. In illustration of this, we may refer to the recent Government Resolution on the subject containing instructions to make the procedure less rigid. The Board of Agriculture recommended in 1917 that Tagavi loans should be given more freely to enable the ryots to purchase such manures, improved seeds and implements as were recommended by the Agricultural Departments. In Bombay, Government in recent years have availed themselves of the Co-operative agency for the distribution of these long-terms loans for effecting permanent improvements.

Outside the scope of any Acts, Government have from time to time accommodated with loans, certain well-known families, such as the Tagore family, to preserve them from ruin. Further, by the *Encumbered Estates Acts*‡ and the *Court of Wards*

* See Wolff: *Co-operation in India*, pp. 1-3.

† See Evidence of Shrinivas Achariyar before the Agricultural Commission (Madras evidence.).

‡ Instances of such Acts are the Acts of 1801 and 1880 for the Taluqudars of Gujarat, of 1870 for Oudh, of 1882 for Bihar, of 1903 for Bundelkhand etc. Under these Acts, estates can be first purchased by Government, sometimes at their own instance, but general proprietors. A special court or officer determines the amount equitably due to the creditors who are paid off in cash or by a terminable mortgage or by a loan from Government secured on the estates etc.

Acts Government have taken power to take special measures on behalf of the larger estates or the indebted proprietors of a definite area, for rescuing encumbered estates and protecting from ruin estates that might otherwise have become insolvent.

All these measures failed to solve the main problem of indebtedness and the provision of a suitable and cheap system of credit to the agriculturists still remained a desideratum. As Mr. Ewbank observes "no mere legislative fiat can control the working of economic law." Government realised this as early as 1884, when the Viceroy in a despatch to the Secretary of State urged the necessity of a private bank to replace the village usurer and supply cheap capital to the solvent ryots. *Under the inspiration of Sir William Wedderburn and Justice Ranade, a committee of the capitalists of the Poona District was formed in 1883 with the object of establishing a bank to finance the agriculturists of the Purandar Taluka.* Relying on the power of recovery through the revenue officers and a few other small concessions, such as priority granted to the loans of the bank, remission of stamp duty etc., they raised a capital of ten lakhs and intended to begin operations by redeeming all the outstanding debts of the ryots.† Though the scheme was approved of both by the Government of India and the Bombay Government, it was negatived by Lord Kimberley, the then Secretary of State, on the ground that the Bank would be virtually a Government institution, that the scheme was financially unsound, as, judging from the assessment of the Purandar Taluka, the ryots could not possibly pay the interest or the amount advanced within any reasonable period; and that the Tagavi Acts of 1883 and 1884, already referred to, along with the Deccan Agriculturists' Relief Act together with better judicial arrangements and proper registration of titles to land, would go sufficiently far to meet the needs of the situation. He further pointed out that what the ryot wanted was a running account after the manner of the Sahukar which the Bank could not possibly allow.

§9 Co-operative Credit:—The idea of using Co-operation in India

* Ewbank : *A Manual of Co-operative Societies*, p. 2.

† *Ibid.*

as a means of combating rural indebtedness and supplying credit was first suggested by Mr. Frederick Nicholson, a Madras civilian who had made a special study of agricultural and other land banks in Europe. Mr. Nicholson was entrusted by the Madras Government with the work of conducting an inquiry as to the feasibility of starting, in the Madras Presidency, a system of agricultural or other land banks and in his famous report published in 1895-97 he pleaded powerfully for the introduction of Co-operative Credit Societies in India. He asserted that in a country like India, no scheme could have any effect unless it was based on an intimate acquaintance with the circumstances of the borrowers on the part of the lender, whether an individual or a Society, and that, although the Sahukar in the villages is usually acquainted with the circumstances of the borrower, he is an isolated unit unconnected with the general supply of credit in the country. He pointed out that the land banks in Europe had been of use only to the large cultivators and disapproved of the idea of state banks as a cure for indebtedness, because the banks would have to be impossibly numerous to satisfy the chief test of credit, viz, proximity and security to the lender, and facility and safety to the borrower, and would demand an elaborate official establishment. [The State could also not command the requisite funds, would develop tendencies of bureaucratic interference] and foster the disposition on the part of the people to look to the State even in ordinary affairs of life. Government would, moreover, incur the odium of the bailiff in addition to that of the tax-collector. Nicholson concluded that Co-operation offered the only satisfactory solution in a country like India for "bringing to the peasant that continued ever-fluctuating credit which he needed." He observed that conditions in Madras were not less favourable than those in Europe for co-operative credit banks as there were already a number of successful indigenous societies known as the *Nidhis* comparable to the Friendly and Building Societies of Great Britain. He suggested that the starting of agricultural co-operative banks should be encouraged by Government by legislation and suitable indirect means, although personal devotion and zeal were necessary for success. He summed up his conclusions in the two words, "Find Raiffeisen." In 1899, the

Madras Government reviewed his report but shelved the whole question by declaring that it was unnecessary to take any action on it, as rural credit in their opinion was not an urgent problem.* In the meanwhile, Mr. Dupernex of the United Provinces Civil Service had published an interesting book entitled the *People's Banks of India* (1900). The idea of Co-operation thus, suggested and brought to public notice in this work and Mr Nicholson's Report began to bear fruit. And in parts of U. P., Punjab and Bengal, some district officers established on their own initiative a few pioneer co-operative societies. These efforts were, however scattered and unco-ordinated and it was also realised that no real advance was possible without the help of special suitable legislation, the Joint-stock Companies Act with its elaborate provisions being obviously unsuitable to the co-operative rural banks.† The *Famine Commission of 1901* gave a further stimulus to the idea of Co-operation by strongly recommending the establishment of the Raiffeisen type of village banks. In the same year, Lord Curzon's Government appointed a strong *Committee under Sir Edward Law* after ascertaining the views of Local Governments on Mr. Nicholson's Report. The Committee received the benefit of the advice of Mr. Henry Wolff, the greatest living English authority on Co-operation. Its recommendations were followed by the introduction of a Bill into the Imperial Legislative Council by Sir Denzil Ibbetson in 1903, which passed as Act X of 1904 entitled the Co-operative Credit Societies Act 1904.

But the subject of Co-operation is sufficiently important to deserve a chapter all to itself.

* See Government of India's Memorandum accompanying the Co-operative Credit Societies Act of 1904.

† See MacLagan Committee's Report, p. 3.

CHAPTER X

AGRICULTURE (Continued):

THE CO-OPERATIVE MOVEMENT IN INDIA.

§ 1 meaning of Co-operation;—We would like to preface our treatment of the Co-operative Movement in India by a brief discussion of the theory and practice of Co-operation with special reference to credit societies of the Raiffeisen type, which has shown a striking capacity to adapt itself to Indian conditions.

The following quotations serve to bring out the salient characteristics of Co-operation:—

“The theory of Co-operation is very briefly that an isolated and powerless individual can, by association with others and by moral development and mutual support, obtain, in his own degree the material advantages available to wealthy or powerful persons, and thereby develop himself to the fullest extent of his natural abilities. By the union of forces material advancement is secured, and by united action self-reliance is fostered and it is from the interaction of these influences that it is hoped to attain the effective realisation of the higher and more prosperous standard of life which has been characterised as ‘better business, better farming and better living’ ”.*

“Every group of individuals, associated to secure a common end by joint effort, may be said to co-operate; e. g., a foot-ball team, a gang of robbers or the shareholders of a speculative company. A century of history has given Co-operation with a capital C a more precise meaning. It indicates the association of individuals to secure a common economic end by honest means. It is also essential in many forms of Co-operation that the individuals possess a personal knowledge of one another.”†

“Co-operation in its technical sense means the abandonment

* MacLagan Committee's Report p. 2

† Strickland: *Co-operation in India* p. 12.

of competition in distribution and production and the elimination of middlemen of all kinds."

"It is a special form of economic organisation in which the people work together for definite business purposes under certain definite business rules. The root of the co-operative idea is a relation between business and ethics which is greater than the necessary commercial honesty of our present industrial system".†

It will thus be seen that in a Co-operative Society the association of individuals for the achievement of the common economic good is purely voluntary and the moral aspect is as much emphasised as the material and special importance is attached to the educative side of co-operative effort.

The scope of Co-operation in theory at any rate is as wide as that of economics itself. In practice, however, it has had hitherto a limited application in industry to production of wealth, though small industries like hand-loom weaving not requiring much capital, initiative and expert business ability may be helped by co-operative organisation. As applied to modern large-scale industry which requires costly and complex machinery, expert business management and discipline, co-operation has not been found practically effective. In the field of purchase or consumption of wealth and of credit, however, it has attained a large measure of success and, as we shall see later on, experience in India does not constitute an exception to this general tendency.

§ 2. Co-operation in other lands :—Although the origin and progress of co-operation in many lands is an enchanting subject, want of space forbids us from attempting anything beyond a bare enumeration of the achievements of the various types of co-operative effort in different countries whose experience has been of special value to co-operators in India.

(i) *England* :—Co-operation was thought of as one among several remedies (including Trade Unionism, Socialism etc.) for overcoming the economic and social ills of the new order of society created by the Industrial Revolution and more parti-

* Seligman: *Principles of Economics*, p 151.

† Gordon and O'Brien

cularly, for ameliorating the condition of the workers. The separation of the producer from the consumer, the wastes of competition, adulteration and profiteering and loss of the economic independence of the worker were the principal evils with which the new capitalistic system had come to be associated.* It was naturally in England that Co-operation was first used as an economic lever for the uplift of the working classes. The propaganda of Robert Owen in favour of a new order of society in which competition was to be replaced by co-operation stimulated the co-operative organisation of consumption by stores being started for the working classes. Numerous shops of this kind for selling articles at reasonable prices were opened for the benefit of the workers and although the career of most of them was brief, the movement was destined to flourish and to make England the country *par excellence* of Consumers' Stores. The famous Rochdale Pioneer Society started in 1844 achieved such splendid success that very soon it came to be regarded as a model and exemplar not only in England but also elsewhere. The system of land tenure in England was not suited for the development of agricultural co-operative credit societies. Co-operative housing has attained considerable success but the chief co-operative distinction of England lies in her Consumers' Stores.

(ii) *France*:—In France, attempts were made to establish state-aided co-operative institutions for the benefit of the industrial classes but without much success. Indeed, the example of France is less valuable as a guide-post than as a warning against excessive spoon-feeding at the hands of the state. Co-operative institutions must above all be self-reliant or else they cease to be truly co-operative.

(iii) *Germany*:—Of more interest to India, is the origin and the progress of the Co-operative Movement in Germany, which may be regarded as the birth-place of Co-operative Credit. Economic conditions in Germany about the middle of the last century as they affected the farmer and the country artisan were not far different from those in India to-day. Economic stagnation and exploitation by the money-lender was the common lot of the small farmer and artisan. This state of affairs made a

* See Strickland : op. cit.

deep impression upon two philanthropists who were contemporaries of each other. They were deeply stirred by the misery they saw around them and set to work independently of each other to relieve it. One of them, Schulze-Delitsch, started credit societies in order to improve the economic condition of the petty traders and artisans, a class of people with whom he was brought into close contact in his capacity as a country judge. The other was Raiffeisen, a Burgomaster, who was employed in one of the poorest districts in Prussia, in which the half-starved peasantry was in the iron grip of the money-lenders. He organised credit and later on other societies for the poor agriculturists. At first both these benefactors of humanity encountered the opposition of their government and consequently the progress of the movement was slow. These difficulties were, however, soon overcome and the movement achieved such brilliant results that Germany came to be looked upon as a model to imitate in co-operative organisation for other countries like Denmark, Italy, Ireland, India, etc.

As credit societies, agricultural, and non-agricultural, have been based in India upon the Raiffeisen and Schulze-Delitsch types respectively, we may here describe the main features of each of them.

Main features of the Raiffeisen and Schulze-Delitsch Societies:-

(i) In the case of a properly constituted Raiffeisen society the following requisites are generally insisted upon:—(1) Limitation of area of operation; (2) no shares or very low shares so as to prevent dividend-hunting and to enable even the poorest persons to become members; (3) unlimited liability in order to ensure better credit and mutual supervision; (4) loans as far as possible for productive purposes only and only to members; (5) credit for relatively long periods with facilities for re-payment by instalments; (6) a permanent and inalienable reserve fund; (7) absence of profit-seeking and dividend-hunting and the crediting of profits to the reserve fund; (8) absolute gratuitousness of administration and democratic management; and (9) promotion of moral as well as material advancement of members.

(ii) The following are the features which differentiate the Schulze-Delitsch type from the Raiffeisen type:—

(1) Wider area of operation; (2) relatively greater importance of share capital; (3) limited liability; (4) short-term credit; (5) a smaller reserve fund, only a part of the profits being assigned to it; (6) a freer distribution of profits or dividends; (7) paid administration to secure efficiency and (8) special emphasis laid on the business aspect of the society rather than on the moral results.

Both the types are necessary beings suited to meet the differing needs of the two classes of society for whom they are meant. We shall discuss this matter further when we take a survey of the credit societies established in India.

(iv) *Denmark*:—The achievements of Denmark in the sphere of co-operation deserve special notice. That country was in a condition of great economic and political depression in the sixties of the last century. The crushing defeat inflicted on her by Germany in 1860, which deprived her of two of her most fertile provinces, combined with the great fall in the price of wheat on account of American competition, had made her economic position extremely critical; and if, in a phenomenally short time she regained her strength and became a rich and prosperous nation, the result was in no small measure due to the comprehensive and highly efficient co-operative organisation which she had evolved to meet the varied needs of the farmer. *The most striking feature of the Co-operative movement in Denmark is the creation of a separate co-operative society for each separate need of the farmer, so that a perfect system of the organisation of agriculture on a co-operative basis at all its stages has been called into existence and the middleman has been completely eliminated everywhere. Even the export trade in the products of the dairy industry is managed by a special co-operative agency. This feature of Danish agriculture deserves to be carefully studied.*

(v) *Italy*:—As Mr. Strickland observes, the co-operative distinction of Italy resides in her societies of industrial and agricultural production, labour and sale. Boots, furniture, electrical accessories etc. are manufactured by societies of artisans. There are also joint cultivation or farming societies, and labour societies for the joint execution of work undertaken by contract with the employers including Government Departments.

*(vi) *Ireland*;—Lastly, the example of Ireland may be mentioned. Until recently the economic, social and political conditions in this country afforded a close parallel with those prevailing in India. For more than five centuries the history of Ireland is a long story of conquest followed by revolt and revolt succeeded by conquest, and alien domination prevented, for a long time, the development of a sound social and economic life in the country. The jealousy of English manufacturers had seriously crippled her manufacturing industry and commerce in the 17th century and the policy of keeping down Irish industry was pursued by England right up to the first quarter of the 19th century. Agriculture was also, until recently, so unorganised and undeveloped that it was unable to help the prevailing poverty and distress. As a result of the various English conquests and confiscations, the land was divided among the conquerors as the spoil of victory and became the property of a handful of big landlords. The system of rack-rents, excessive subdivision of holdings, absence of security of tenure, wasteful and inefficient methods of husbandry and the lack of alternative occupations led to acute suffering and caused emigration, especially to America, on a colossal scale. The ameliorative land legislation initiated by Gladstone was well-meant but did not go very far to remedy the agrarian grievances. In short, the situation with which the pioneers of co-operation in Ireland were confronted was so complex and difficult that it may be said to have embraced every single evil and handicap which could conceivably arise in any country. It was under these unpromising circumstances that the co-operative movement was inaugurated under the leadership of Sir Horace Plunkett, and has succeeded in a brief space of time in transforming the whole face of the country and realised in a large measure the ideal of "better business, better farming and better living", which this great Irish Co-operator had placed before himself.

For India, it is not so much the special types of co-operative organisation that have been developed in Ireland that are instructive as the very fact that, from well-nigh hopeless conditions, which were, if possible, even worse than those obtaining at present in India, Co-operation has helped Ireland to emerge into the light of day and inaugurated an era of hope and prosperity.

*See Smith-Gordon and Staples: *Rural Reconstruction in Ireland*, chap I.

What Co-operation has done for Ireland, it has every chance of doing for India also.

The Co-operative movement has spread far and wide over the world, in the East as well as in the West, and has, in recent times, assumed an international character owing to its essentially humanitarian aims and tendencies. The recent institution of the Annual Co-operator's International Day is a fitting embodiment of the cosmopolitan significance of the Co-operative Movement in the capitalistic era in which we are living today and shows how co-operation has come to be regarded as one of the chief hopes of the masses in all countries. As a cure for the evils of capitalism the advantage claimed by co-operation over socialism and other suggested remedies is that, while preserving intact the stimulus of self-interest, it organises it on a higher plane and on the basis of collective effort.

§ 3. Co-operation and its uses in India:—For us in India, Co-operation has a special message. The bulk of our population consists of small farmers and artisans and even in our growing towns, the principle of co-operation has beneficent applications, e. g., in the sphere of co-operative purchase and housing for the benefit of the middle classes and the wage-earners. Moreover, though some of the Western types of co-operation may be new to this country, the principle and spirit of co-operation is by no means alien to the genius of the country as it underlies many of the characteristic institutions of the country, such as the Caste System and the Joint Family and is also evidenced by societies like the *Nidhis* in Madras.

§ 4. Act of 1904:—We have already reviewed the circumstances which led to the passing of the *Co-operative Credit Societies Act of 1904*. [The Act provided for the formation of credit societies only and postponed all forms of non-credit co-operation.] This policy was deliberately adopted not because the vital importance of other kinds of co-operation was not fully realised, but because it was held that among a relatively backward population, the difficulties involved in the management of productive and distributive business were likely to prove a stumbling block in the way of progress. [Credit societies with their simple organisation and method of management afforded an easy field in which the principles of co-operation could be learnt and practised and

attention was, therefore, mainly devoted to them.* Further, special emphasis was laid on rural rather than urban credit in view of the more urgent character and greater importance of the former.

We may now notice the important provisions of the Act :—
(Any association of ten persons who had attained their majority could apply for registration and form themselves into a co-operative society.) The applicants and future *[members were to be from the same village]* or to be members of the same tribe or caste or to be from the same town. *[Credit societies were distinguished as rural and urban according as four-fifths of their members were agriculturists or not respectively.]* *[In the case of rural societies, unlimited liability was the rule; in the urban societies the matter was left to the option of the society.]* Different rules were prescribed for the allocation of profits for the two classes of societies. *[A rural society was to carry all its profits to an inalienable reserve fund]* unless otherwise directed by the Local Government in special cases. *[In the case of urban societies, only one-fourth of the profits was to be carried to the reserve fund.]* Certain limits were placed on the size of the share capital where this was raised; *[no member was to hold more than one-fifth of the shares, the total value of an individual member's shares could not exceed Rs. 1,000, nor could he have more than one vote.]* The societies were to raise the required *[working capital]* by entrance fees, shares, deposits from members and loans from outside and were to distribute the funds so raised only among members. *[A loan from one society to another was to be subject to the permission of the Registrar.]* Registrars were to be appointed in all provinces to exercise supervision over the organisation and control the movement. *[Government reserved certain powers for themselves such as (a) compulsory inspection and audit, (b) compulsory dissolution of a society, if necessary, by the Registrar, subject to an appeal to the Provincial Government and (c) wide rule-making power.]*

The movement was assured generally of Government sympathy, assistance and guidance. The two cardinal objects

* See MacLagan Committee's Report, p. 7.

which the Government kept in view in regard to the above provisions were *simplicity and elasticity*: simplicity so as to avoid elaborate schemes beyond the comprehension of the ryots and elasticity to leave full scope for the development of the movement on lines suitable to each province subject only to certain broad general principles incorporated in the Act. [To encourage the movement Government offered certain *concessions and privileges*] to the societies registered under the Act, [such as exemption from income tax, stamp duties] registration fees, the grant of the benefits of a corporate body, priority over the ordinary creditors of a member next to Land Revenue and free Government audit etc. Government also promised the grant of loans to societies free of interest for the first three years, subject to the condition that the loan was not to exceed Rs. 2,000 to be granted only up to an amount raised independently by the society concerned.

§ 5. Review of the progress from 1904 to 1912 :—The various Provincial Governments lost no time in giving effect to the new policy of co-operation under the guidance of the Registrars who were appointed for the purpose. In every province, the new doctrines struck root and the progress made was remarkable as will be seen from the following figures :—

Year	No of societies	No. of members	Amount of working capital Rs.
1906-07	843	90,844	23,71,683
1907-08	1,357	149,160	44,14,086
1908-09	1,963	180,338	82,32,225
1909-10	3,428	224,397	1,24,68,312
1910-11	5,321	305,058	2,03,05,500
1911-12	8,177	403,318	3,35,74,162

* See Sir Denzil Ibbetson's Explanatory Memorandum accompanying the Act of 1904.

The movement soon outgrew the best expectations of its promoters and in two directions especially, the need for a change in the Act of 1904 was felt. The credit societies established under this Act had paved the way for *co-operative societies for distribution and other purposes than credit*, for which as yet there was no legislative protection. At the same time, the need for a free supply of capital and an improved system of supervision had led to the formation of various *central agencies*, afterwards known as Unions and Central Banks, to finance and control the primary credit societies and they were also not recognised by the Act of 1904.* Moreover, the *classification of societies* into urban and rural societies was found to be *unscientific and inconvenient*. Lastly, the prohibition of the distribution of profits in rural unlimited liability societies was a hardship especially where, as in Punjab and Madras, share capital had become important. On a re-examination of the whole situation the Government of India decided to pass entirely fresh legislation to remove the deficiencies of the Act of 1904.

§ 6. The Co-operative Societies Act 1912 :—Accordingly the Co-operative Societies Act of 1912 was passed. [The new Act recognised the *non-credit forms* of co-operation such as purchase, sale, production, insurance, housing etc.] [It also recognised *three kinds of central societies* as distinguished from primary societies viz., (a) Unions consisting of primary societies for mutual control and audit, (b) Central Banks consisting partly of societies and partly of individuals and (c) Provincial Banks consisting of individuals.]

[In view of the importance of share capital in certain provinces like Madras, Punjab and Burma, permission was given to declare dividends on shares] in unlimited liabilities societies subject to the general or special permission of the Provincial Government concerned. Express permission was also given to all societies to set apart a portion of their profits not exceeding 10% for educational and charitable purposes after one-fourth of the profits had been carried to the reserve fund. [The new Act superseded the

* See MacLagan Committee's Report, p 4

earlier distinction between rural and urban societies by a more scientific one between *limited and unlimited liability societies*.] (The Act laid down that "the liability of a society of which a member is a registered society shall be limited, while that of a society of which the object is the provision of credit to its members and of which the majority of members are cultivators shall be unlimited" and that "in all other cases it shall be optional."*)

§ 7. Progress of the Movement subsequent to the Act of 1912:— The immediate effect of the new Act was to give a fresh impetus to the Co-operative Movement. As will be seen from the following statement, the number of societies and their members went on increasing steadily, though the rate of progress has not been uniform in all Provinces:—

Year	No. of societies	No. of members	Amount of working capital Rs. (in thousands)
1914-15	17,327	824,469	122,292
1916-17	23,036	1,048,425	31,12,25
1921-22	52,182	1,974,290	31,12,25
1923-24	61,106	2,313,567	40,52,97
1925-26	80,182	3,058,025	57,60,39

The relative position of the provinces in 1925-26 may be gathered from the statistical table on the next page.

New types of societies for sale of produce, cattle insurance, milk supply, yarn, silk and manure purchase, retailing of farm implements and common necessities were started and most of them appeared to be prospering. The number of central societies was increasing rapidly and the movement was fast winning the confidence of the public. In 1914, the Government of India reviewed the whole situation and issued a comprehensive Resolution laying down in general terms the practical lessons that might be drawn from experience up to date. The sums involved in the move-

* See Ewbank's Manual for the Act of 1912.

Province.	Number of societies	Number of societies per 100,000 inhabitants	No. of Members of primary societies	No. of members per 1,000 inhabitants.	Amount of working capital (Rs. 1000)	No. of annas per head of population
Madras	11,971	28.3	745,689	17.6	11,56,35	43
Bombay	4,655	24.1	438,225	22.7	8,78,69	73
Bengal	12,776	27.4	446,591	9.6	7,48,29	26
Bihar & Orissa	7,220	21.2	198,398	5.8	4,10,24	19
U. P.	6,236	13.7	158,719	3.5	1,88,16	7
Punjab	14,526	70.2	399,466	19.3	9,28,97	72
Burma	5,383	46.0	135,196	11.6	4,73,04	65
C. P. & Berar	4,257	30.6	69,223	5.0	4,32,96	50
Assam	947	12.5	45,387	6.0	39,10	8
N. W. F. Province	16	0.7	338	1	39	...
Coorg	218	109.0	10,643	53.2	5.87	47
Ajmer	590	118.0	15,309	30.6	42,37	136
Hyderabad Adminis. area.	8	8.0	1,889	18.9	2,77	44
Delhi	213	42.6	4,014	8.0	13,47	43
Total Br. India	69,016	28.1	2,669,087	10.9	53,00,67	35
Total I. States	11,166	32.9	388,938	11.5	4,59,72	22
Grand Total	80,182	28.7	3,058,025	11.0	57,60,39	33

the Provinces on the suggestion of the International Institute of Agriculture at Rome :—(1) Credit (2) Purchase or Purchase and Sale (3) Production, (4) Production and Sale, (5) Insurance and (6) Others.

The following statistics give some idea of the progress made by various types of (i) Agricultural and (ii) non-Agricultural Societies up to the year 1925-26 :—

	Credit	Purchase and Purchase and Sale	Production	Production and Sale	Other forms	Total No of societies	Number of members.	Working Capital Rs.
Agricultural	66,318	349	565	328	681	70,733	2,321,959	22,93,46,496
Non-Agricultural	3,945	568	13	870	1,634	7,069	730,126	8,85,38,399
Total	70,263	917	578	1,198	2,315	77,802	3,052,085	32,78,84,895

(1) A "Resource Society" means a society formed with the object of obtaining for its members the credit, goods, or services required by them.

(2) A "Producers' Society" means a society formed with the object of producing and disposing of goods as the collective property of its members and includes a society formed with the object of collective disposal of the goods of members of such a society.

(3) A "Consumers' Society" means a society formed with the object of obtaining and distributing goods to or of performing services for its members, as well as to other consumers and of dividing among its members and customers, in a proportion prescribed by the rules or by the by-laws of such society, the profits accruing from such supply and distribution.

(4) A "Housing Society" means a society formed with the object of providing its members with dwelling houses on conditions to be determined by its by-laws.

(5) A "General Society" means a society not falling under any of the four classes mentioned above.

See Calvert : *Law and Practice of Co operation in India*.

This brings out the overwhelming predominance of the credit societies, especially the Agricultural Credit Societies and the comparatively poor development of other types, though the situation in this respect is gradually improving. It must be remembered, however, that this classification is somewhat defective in so far as the returns based on it do not give an adequate idea of the true development of co-operation in India in certain important directions. As we shall see later on, many a credit society in India has tacked on purchase or sale or production or a combination of two or three of these functions to its original business of giving credit.*

§ 9. Primary Agricultural Credit Societies :—Let us now consider the different types of co-operative societies in India laying special emphasis on rural credit societies which, as already shown, are by far the most important and represent above 90 per cent of the total number of societies. Beginning with a typical primary agricultural credit society we may consider it under various headings as follows :—

(a) *Size* :—Any ten persons can apply for registration of a proposed rural credit society. *The maximum strength of the society should preferably not exceed 100*, because as the number increases the efficiency of management and supervision as also the quality of training received by the members suffer.

(b) *The area of operation* :—This should be *restricted to a village as far as possible*, and the rule should be *one society for one village*, which is usually the case. This is necessary to ensure mutual knowledge and the exercise of mutual control on the part of members. Exceptions to this rule in favour of certain tribes and communities have, however, to be allowed.

(c) *Liability* is *unlimited* unless exemption from this rule is permitted by Government. As the MacLagan Committee explain,¶ unlimited liability means contributory unlimited liability, i. e., in the case of default "where there is a deficit in the engagements of a society to its creditors, this

*See P. Bhattacharya: *The Co-operative Organisation in British India*, p. 41.

¶ Report p. 27.

deficit should, after the full payment of shares (if any), be recoverable by a series of per capita levies upon the members upon their property, direct proceedings by a creditor against individual members being forbidden." Un- limited liability carries with it two-fold advantage. *It exercises an educative influence on the members by stimulating mutual control and supervision and improves the credit of the society by inspiring confidence amongst its outside creditors.*

(d) *The Management*:—is democratic and honorary.* It is entrusted to two bodies, viz., a *General Committee* consisting of all the members and a *Managing Committee* which is a smaller body of from five to nine members chosen from among the members of the former body at its annual general meeting. The General Committee elects members of the Managing Committee, appoints a paid secretary, who must not be a member, adopts the annual balance sheet submitted by the Managing Committee, and auditors, considers the orders and reports of the Registrar, credit of the expels members if necessary, fixes the maximum rates separately for the society as a whole and of the individual members, and amends the by-laws of the society. The Managing Committee is responsible for the routine and the executive business of the society. It admits new members, disposes of their applications made by members, recovers arrears due by members and exercises supervision over them, raises funds for the society and inspects the accounts maintained by the Secretary.

(e) *Working capital*:—This may be divided into external and internal sources† (i) *Internal Sources*:—these consist of entrance fees paid by members, deposits by members, share capital, &c. If any, and surplus assets in the reserve fund of the society. Entrance fees are necessary to cover preliminary expenses and serve the useful purpose of bringing home to members that the privilege of borrowing is not a free one.

* Honorary services are necessary because the Bank works on long loans at benefit of its own members with the primary object of facilitating to nullify reasonable interest. Any addition to these expenses would tend to nullify these objects. Secondly, a sense of public duty and business habit involved is encouraged by gratuitous service. Thirdly, the amount of labour trifling.

† See MacLagan Committee's Report p 13

lege of membership implies sacrifice. *Share capital plays only a small part except in some Provinces like Punjab, Madras, U. P. and Burma.* It is generally defended on the ground that it helps a co-operative body in the speedy acquisition of a substantial permanent capital of its own which is a highly desirable object to aim at. But on the whole, this object is best fulfilled by forming a *substantial reserve fund* fed by a wide margin between the borrowing and lending rates of societies, especially because lending rates in India are generally high. In the Provinces mentioned above, however, members of rural credit societies have shown a preference for share capital, so as to enable them to have their own capital. There should be no objection to this, provided the shares do not keep out poor persons and do not lead to dividend-hunting as in an ordinary joint-stock company; and as a matter of fact, the resort to share capital is often being found necessary to lessen the dependence on outside agencies. *Deposits locally raised constitute a highly desirable method of raising the capital required by a rural credit society.* "Such deposits" as the MacLagan Committee remark, "imply thrift in the village, form a good lying or reserve money, and they tend to interest in the management of the society, a useful body of men who stand as sentries over their own deposits." It must be admitted, however, that *local deposits form only a small part of the total working capital of rural societies in India* in contrast to those in Germany and other European countries, where deposits locally raised practically supply the whole of the working capital. There are of course special difficulties in India. *The habit of deposit banking is yet in its infancy, especially in rural areas and money-lending and commerce fetch higher rates of interest than can be secured on deposits.* Furthermore, the average income of the masses is very small and leaves a very narrow margin of saving, if any. The MacLagan Committee is fully justified in expressing the view that unless, as the Co-operative movement progresses, there is a substantial increase in the deposits, Co-operation will have failed in one of

* Report, p. 28.

its objects.* The system of compulsory deposits is, however, unsound and thrift can be better stimulated by the introduction of shares payable by small instalments.

We have touched above on the importance of a reserve fund formed out of the profits of societies secured by charging a higher *rate of interest on loans* granted to the members as compared to that payable by the society on the loans borrowed from outside. In fixing this margin it is necessary to avoid both the extremes of making it too narrow or too wide: for in the first case, the attainment of *financial self-sufficiency* by a society may be indefinitely postponed; while in the other case, the object of providing *cheap credit* would be defeated. These considerations should be allowed due weight in fixing the rates of interest charged on loans to members.

(ii) *External sources*:—Turning to the external sources of capital, these are mainly *loans and deposits* from other societies from Government and most important of all, from central financing agencies like the Central and Provincial Co-operative Banks. We have already indicated the conditions subject to which Government give loans to societies. Government have very wisely avoided the policy of giving doles by restricting such loans to quite an insignificant amount. Regarding loans from central financing agencies we shall have more to say later on when we deal with the problem of co-operative finance. We need only remark here that the rural credit societies are today largely dependent upon such outside loans; shares and deposits contributing only a fraction of their total working capital.

Statistics of working capital:—The following statistics show the relative position of the different constituents of the working capital of Agricultural Societies in 1925-26. As out of a total of 70,733 Agricultural Societies, 66,318 are Credit Societies, the figures given here may be regarded as fairly typical with reference to Credit Societies.

* "In Germany, more than 87 per cent of the capital of the Raiffeisen societies consists of deposits, while in India the corresponding percentage is only 18. It must be remembered, however, that even in Europe deposits came in slowly at first, and in India we are still at an early and experimental stage". MacLagan Committee's Report, p 29.

X THE CO-OPERATIVE MOVEMENT IN INDIA. 347

Share capital (paid up)	Rs. 2,71,79,322
Loans and Deposits held at the end of the year from members,	1,36,49,963
non-members,	95,22,264
Societies,	15,22,792
Provincial or Central Banks and Government	14,06,51,785
Reserve Fund	31,98,278
	3,36,22,092
Total...	22,93,46,496

We may also give here statistics regarding the composition of the *working capital of all societies* in India in 1925-26.*

	Rs. (1,000)
Share capital (paid up)	7,80,65
Loans and deposits held at the end of the year from members,	3,86,61
Societies,	2,02,18
Provincial or Central Banks,	19,21,90
Government and	1,58,04
Non-members and other sources	18,16,00
Reserve Fund	5,13,01
Total...	57,60,39

(f) *The object of loans*:--Loans are given to members only, for three objects; *productive purposes, non-productive purposes and redemption of past debts*. Productive loans fall into three classes, *short-term loans* for current agricultural operations and payment of Government taxes and *long-term loans* for permanent improvements on land. *Loans for unproductive purposes*, such as ceremonial expenses are theoretically not permissible, but they are necessary to prevent the ryots from falling into the clutches of the money-lenders. It is desirable, however, to inculcate economy as regards such expenditure by restricting these loans to *small sums* and to *absolutely essential purposes*. Turning to the redemption of past debts, the ideal policy should be to enable

* Statements showing the Progress of the Co-operative Movement, 1925-26.

members to be free from all obligations other than those to their society. There are, however, two limiting considerations which make a *wholesale redemption of the debts* *impracticable and undesirable*; impracticable because of the impossibility of raising funds large enough for this purpose in addition to those required for loans to members for other purposes; undesirable because the psychology of a person chronically and heavily in debt, such as the average cultivator in India, must be considered. In his case, a complete release from the burden of indebtedness effected at one stroke, even assuming such a feat to be possible, would have a distinctly demoralising influence leading to recklessness and extravagance. In the interest of thrift itself, emancipation from debt must come about by gradual stages. The point, however, is of purely academic interest because owing to deficiency of funds what is to be feared is that the process of redemption will be too slow rather than too fast.

(g) *Repayment of debts*:—As regards the time of repayment, the general rule is that *agricultural finance should follow the agricultural cycle of crops* which should be an average of good, bad and indifferent seasons. In other words, repayment should be made out of the proceeds of the productive objects for which the loan has been issued; as for unproductive loans, they should be so adjusted to the position of the borrowing member, that by the exercise of thrift it should be possible for him to save enough out of his income to meet the instalments of his loans as they fall due. *More should not be lent than can be repaid* by fairly easy instalments within a reasonable period. *Punctual repayment should be the ideal* constantly striven for and laxity in this respect should be positively discouraged. Postponement should be granted only in urgent cases of real distress. *Fictitious repayments and frequent and automatic renewals of loans should not be allowed* as they do great injury to the interests of the society. Precautions to ensure punctual repayments should be taken such as the *fixing of normal credit of each member*, *careful selection of borrowers* from amongst the applicants for loans, *a proper scrutiny of the objects* for which the loans are sought and *effective supervision* † by other members and sureties of the activities of the borrowing members and so forth.

† See MacLagan Report, p. 39. and V. L. Mehta, op. cit. pp. 84--86.

(h) *Security*:—The ideal co-operative security is that offered by *honesty and character*. "Honesty should be capitalised". In practice, however, the risk of bad debts may be lessened and the credit of the society as a whole may be improved by asking the borrowing member to furnish *sureties* normally from among the members and accepting as collateral security moveable and immovable property, though material security is strictly speaking inconsistent with the dictates of Co-operation. There is, of course, the consideration that if material security is altogether excluded there is the danger of its owner pledging it with the money-lender. It has, therefore, to be tolerated to some extent. In all cases, however, the main security ought to be personal and a general bias against material security should be maintained.

(i) *Division of profits*:—There are no profits to be distributed in the ordinary commercial sense in a rural credit society, especially if there is no share capital, all profits being credited to the reserve fund.* Exception may be made, however, in two cases provided for by the Act of 1912, which allows a certain amount of expenditure from the profits for such objects as education and charity and the distribution of limited dividends on share capital where there is any. Such expenditure has the additional advantage of arousing interest in the movement. In no case, however, should a Co-operative society be allowed to degenerate into a dividend-hunting concern.

(j) *Arbitration*:—Arbitration for settlement of disputes between a society and its members is necessary to avoid the drain on the time, energy and the funds of the society and to discourage litigation by exempting the society from the jurisdiction of the ordinary Civil Courts and Procedure. Such arrangements exist in Bombay and some other Provinces.

(k) *Summary powers*:—The grant of summary powers to societies for the recovery of arrears is most objectionable, militating, as it does, against the basic principle of Co-operation. The only weapons of recovery should be the joint liability of members and exercise of moral force apart from the ordinary method of recovery through the Civil Courts. The grant of sum-

* See V. L. Mehta : op. cit , p. 91.

mary powers would lead to an injurious relaxation of the close mutual vigilance and supervision.

(1) *Dissolution*.:—Though it is desirable to use the power of dissolution of a society sparingly, it is necessary to provide for some such power to abolish such societies as are a blot on the whole Co-operative movement and offer no prospect of a useful career.* The Act has provided for the exercise of such power by the Registrar after an inquiry into the affairs of the society.

§ 10. The chief recommendations of the Maclagan Committee:—We may close this survey of the primary rural credit societies by summing up briefly the main recommendations of the Maclagan Committee in this behalf.

The Committee recognise the importance of rural credit societies and emphasise that in the first instance, they should be (a) co-operative and in the second, (b) businesslike. (a) They lay down the following conditions as necessary to make them truly co-operative:—(1) Knowledge of the co-operative principles and proper selection of members, (2) honesty to be the chief basis of credit, (3) dealings with members only, (4) loans not to be for speculative purposes, (5) exercise of careful scrutiny before advancing loans and proper vigilance afterwards, (6) ultimate authority to be in the hands of members and not in those of office-bearers, (7) encouragement of thrift and the constitution of an adequate reserve fund, (8) only one vote for one member and maximum publicity within the society, (9) capital to be raised as far as possible from savings amongst the members and neighbours and (10) punctual repayment of loans.†

Regarding the starting of new societies, the Committee sound a note of warning that the pace of the movement should not be

* "The causes put forward for the failure of societies are various and include a want of due supervision, indiscreet loans, contumacy of borrowers, unpunctuality in repayments, the restriction of loans to a few individuals, dishonesty or incompetence of society officials, bad selection of members, the extension of a society over too large an area, concealment of old debts, faulty constitution, internal dissensions, insufficient funds or membership, the preponderating influence of one member, and general lack of interest by members in the affairs of the society." Maclagan Committee's Report, p. 53

† Report p, xi

unduly quickened from outside. *The urge towards co-operation should be spontaneous as far as possible.* The Committee also point to the necessity of guarding against the dangers of too facile credit arising out of unduly low rates of interest and the need of basing agricultural finance on the agricultural cycle.

(b) Turning to the business aspect, the Committee express the opinion that local deposits should form a substantial portion of the working capital and hold that the success of the rural credit movement should be judged by this standard. They recommend somewhat higher rates of interest on deposits of members and every other effort, short of compulsory deposits, to promote thrift and attract local deposits. They do not favour deposits on current account as they cannot be safely lent out; for this reason, long-term deposits should be encouraged by offering higher rates of interest. Short-term deposits for less than one month may, however, be permitted to meet the demands for short-term loans. They also allow a second exception in favour of savings deposits to stimulate thrift. They emphasise that the ideal should be to lessen the present dependence of rural credit societies on central financing agencies which, however, are admitted to serve a useful purpose in the meanwhile. The Committee observe that audit and supervision are very important from the point of view of the success of the movement, and recommend that in addition to a super-audit to be undertaken by a special Government staff once in two or three years, there should be a primary audit undertaken annually by non-official agencies controlled and maintained by the societies themselves. They deprecate the grant of summary powers of recovery and approve of arbitration.

In conclusion, the Committee refer to three dangers to which the rural credit societies are liable, viz., (a) possibility of perversion to wrong ends, (b) lack of active co-operative spirit and (c) unpunctuality of repayment. The first defect is generally considered to be exaggerated by the Committee and is not established by present experience.* The second danger, however, is real, for most of our rural credit societies must be pronounced to fall short of the co-operative ideal even when allowance is made for the backwardness and ignorance of the people. Cheap-

* See V. L. Mehta: op. cit., p. 61.

money-lending through the society has come to be regarded as the most important aim,* while other co-operative aims and safeguards are neglected. The remedy lies in the advance of the masses in literary and general enlightenment and their special education in the principles of true co-operation. The Bombay Central Co-operative Institute is doing very useful work in spreading sound education in co-operation and creating an enthusiasm for it. The defect of unpunctuality undoubtedly exists and is deplorable, and the general impression is that, owing to the increasing uncertainty of the monsoon, it is on the increase.

§ 11. Non-Agricultural Credit Societies :—Speaking about the need for non-agricultural credit societies, the Maclagan Committee observe, " With rising prices, insufficient and insanitary housing accommodation, wages often held in arrears, and a desire for a higher standard of living consequent on the spread of education, industrial difficulties are bound to increase, and we are of opinion that any form of organisation such as Co-operative Societies that has a tendency to alleviate these difficulties is worthy of support."† Moreover, the excessively seasonal demand for money by agricultural societies makes it difficult for central banks to employ their capital profitably. Though at the outset more attention was paid to the starting of rural credit societies, non-agricultural credit societies of the Schulze-Delitsch type have also made some progress in all the Provinces, a development which is in consonance with the policy recommended by the Maclagan committee of abandoning the earlier emphasis on agricultural credit. The following main types of non-credit societies may now be discussed :—

* " The necessity for developing a truly co-operative system rather than cheap money-lending and the danger involved in inviting deposits from the public for pseudo-co-operative institutions are matters, that have been to a serious extent overlooked. Rapid extension has resulted in the growth of primary societies to an extent with which the Registrar and his staff were unable to cope and faults have grown up which were inseparable from the lack of care, information and adequate means of supervision." Maclagan Committee's Report, p xviii.

† Maclagan Committee's Report, p 12.

(i) *Peoples' Banks*:—Urban credit societies of the Luzatti type meant specially for the benefit of the middle class serve a useful purpose in making good, at least partially, the deficiency of joint-stock banking facilities in India and supplying a training ground for the study of the theory and practice of banking, though they are often not truly co-operative. In Bombay, there has been a rapid development in this connection and there are now 55 fully fledged urban banks with a working capital of over Rs. 50,000 and 487 other urban banks and societies. Speaking about them, the Registrar of Co-operative Societies, Bombay, in his Annual Report for 1926-27, observes, "It would be difficult to exaggerate the effect which the urban and people's banks are having on the life of the towns. Local trade is being developed, or fostered in areas where otherwise population and industries are dwindling; small artisans and citizens in every walk of life are acquiring the banking habit; and in almost every important town the influential persons of all castes and professions are taking up this side of co-operative activity as one of the main forms of public work."

(ii) *Communal societies*:—Credit societies based on communal lines particularly lend themselves to co-operative effort on account of the strength of the communal feeling, which, however, is likely to run counter to the ideal of co-operative brotherhood. Within certain limits, however, these societies are useful for the educational and economic uplift of the backward communities.

(iii) *Societies for the employees of large firms and of Government Departments*:—The objects of such societies ought to be mainly the encouragement of thrift and saving and not the wholesale redemption of past debts.† Official tutelage and favouritism are the evils to be guarded against in this class of credit society.

(iv) *Artisan Societies*:—These correspond in their constitution and business to agricultural credit societies. Their area of

§ See MacLagan Committee's, Report, p. 13

† Ibid.

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operations is small, membership is open only to persons of the same occupation, the share capital is small and funds have to be borrowed from central institutions and other sources. Unlimited liability is, therefore, essential though under the law it is optional. *The most important of these societies are those established for weavers.* The handloom weaving industry being even today the most important cottage industry supporting about 60 million people, it needs to be organised on a co-operative basis as suggested by the Industrial Commission who recommend state assistance to such societies.* In Bombay, considerable progress has been achieved in this direction, and direct financial help by Government to such societies would be thoroughly justified. A few credit societies for other small artisans, such as basket-makers, shoe-makers, blacksmiths, carpenters etc. have been organised but the progress made so far has been inconsiderable. The hope may be expressed, however, that Co-operation may be used as a lever for the reorganisation and revival of the small industries of India, which in spite of the advance made by machine production still constitute an integral part of the economic life of the country. The small artisan is indeed faced by the same difficulties as the small farmer in respect of credit and other needs and a simultaneous organisation of both the types of small-scale industry is urgently called for.

(v) *Societies for mill-hands*:—There is an urgent need for organising credit societies among the mill-hands in such factory towns as Bombay and Calcutta. Their economic and social conditions are far from satisfactory. Low wages, bad housing, high cost of living, exploitation by the jobbers, ignorance, illiteracy, heavy indebtedness and intemperance are some of the evils from which they are suffering. These conditions can be largely improved by organising the wage-earners into co-operative societies. Public-spirited employers of labour like the Tatas and Currimbhoy have rendered some help to such societies many of which have been organised by ^{as ha} Social Service League in Bombay for the benefit of the ^{ie I} ^{ch} hands. Apart from providing cheap credit and promoting ⁿ C_{lus}, these societies

* Industrial Commission's Report, pp. 200-21

also serve as centres for various social and educational activities which react favourably on the efficiency of the workmen.

(vi) *Societies for depressed classes*.:—The social and economic conditions of the depressed classes are much worse even than those of the factory hands and co-operative societies are calculated not only to improve their economic condition but also to enable the depressed classes to raise their social status. A very praiseworthy attempt has been made in Bombay by the Debt Redemption Committee under the guidance of Mr. G. K. Deodhar of the Servants of India Society. The Committee supervises the organisation of societies for the depressed classes, and instructs the members in the principles of co-operation. Government help the societies by grants for meeting the expenses of the Committee. In the Madras Presidency, similar work of relieving the 'untouchables' has been undertaken to some extent at various centres by Social Service Leagues.\$

The Non-Credit Co-operative Movement.

§ 12. *Some general Questions*.:—Before taking up a study of the various types of non-credit societies we may briefly discuss some general questions relating to the subject.

(a) *The recent development of the non-credit movement*.:—"The forms of co-operative activity that have proved most popular and successful in England are those connected with purchase, production and distribution. But in most Continental countries these branches of work were not undertaken until credit societies had been firmly established, and development in India has followed the Continental precedent."† The Co-operative Credit Societies Act of 1904, as its title indicates, did not make any provision for non-credit forms of co-operation on the ground of inability to overcome the difficulties connected with the more complex organisation and management of non-credit societies. However, as the Maclagan Committee remark, the demand for non-credit co-operation is a healthy sign of the appreciation of co-operative principles by the people and is essential to the balanced development of the economic condition of the country as a

\$ See V. L. Mehta and Subbaiya: op. cit, pp., 111-12.

† Maclagan Committee's Report, pp. 107.

whole; therefore, it was, necessary to make an effort to meet it. This was done by passing the Act of 1912 which recognised non-credit societies. The progress made by the non-credit movement, however, has not been uniform in all the Provinces. The earlier policy of concentration on rural credit has not yet weakened appreciably and there have been greater difficulties in the way of non-credit than of credit co-operation. At the same time, the importance of non-credit institutions is now being realised to some extent as attested by the establishment of societies for various purposes, such as purchase, sale, production, insurance, housing, both in the agricultural and non-agricultural sphere. The general organisation of agriculture on a co-operative basis bringing within its scope all the stages of agriculture is a movement fraught with great possibilities. It is now clearly recognised that the benefits from co-operative credit can be fully realised only if the middleman in other spheres is eliminated by the starting of co-operative societies for non-credit purposes as in Denmark.

(b) *Types of non-credit Societies* :—We may divide the non-credit societies into *agricultural and non-agricultural*, each of which may be further subdivided into several types, such as societies for the purchase of raw materials and implements, sale of produce, production, distribution or consumption, insurance, construction and acquisition of dwelling houses and miscellaneous. The official classification of non-credit societies and statistics pertaining to them have been already mentioned. It has also been pointed out that many credit societies undertake several non-credit activities as well.

(c) *Liability* :—Under the Act, it is optional for non-credit societies to accept either limited or unlimited liability. The nature of the liability varies according to the needs and circumstances of the different types of societies. For example, agricultural non-credit societies will generally prefer limited liability, as their members are likely to have already pledged themselves to unlimited liability if they happen to be members of a credit society as well. Dairy societies and those of weavers, on the other hand, might find unlimited liability more suitable as their need for external capital is usually great.*

* See Mehta and Subbaya: *op cit.*, p. 116.

(d) *Dealings with non-members*:—Such dealings, according to the strict co-operative theory, are undesirable. In the case of artisans' insurance and building societies, dealings are necessarily confined to members. *It is in purchase and sale societies that the question of dealings with non-members arises.* If such dealings are allowed, membership is apt to be stagnant and the ordinary commercial profiteering is likely to creep in, and there would also be unfair competition with private traders as, under the Act, the co-operative societies enjoy certain privileges and concessions denied to the ordinary private trader. In certain cases, however, such dealings may be permitted, especially for *propagandist purposes* to enable a society to manage its affairs with *profit and economy* and demonstrate its utility to non-members so that they may also join.

(e) *A separate society for a separate purpose*:—Another question to be considered is whether there should be a separate society for each separate purpose or whether a society may simultaneously undertake a varied set of activities. The true co-operative ideal demands a separate society for each purpose and, indeed, such a plan sounds most businesslike. The chief *practical objection* to it arises on account of the *paucity of the right type of personnel* for the management of several societies in a village. In such cases it is advisable to allow, say, a credit society to tack on other activities to its main business.* Mr. Calvert also points out that in Bavaria, Saxony, Belgium, Austria etc., the credit society or local bank does many other things than supply credit. The same author writes, "The most striking feature of Japanese rural co-operation is the very common combination of various branches, purchase, sale and so on, and almost in every instance credit, in one and the same society.† The true line of advance, however, is indicated by Denmark where the co-operative organisation of agriculture is highly developed, and where

* "For business purposes separate societies are doubtless an advantage, but in a small village they are difficult to organise, and certainly more expensive to run. Opinion in fact is agreed that in a small village it is impossible to keep banking and trading apart." Darling: op. cit.

† Calvert: *Law and Principles of Co-operation*, pp. 29-30.

an individual agriculturist is at the same time member of several societies in his village.

§ 14. Non-Credit Agricultural Movement:—*We may now proceed to discuss the progress made by the non-credit movement in India in its two branches, agricultural and non-agricultural. The need for the agricultural credit movement is very great in India; for as the example of Denmark shows, agriculture can thrive in a country of peasant proprietors only if agricultural operations are organised on a co-operative basis enabling the middlemen to be dispensed with, so that all the profits might go to the cultivators who at present are mulcted heavily in their sale and purchase transactions by the money-lender, who is a grocer and merchant as well, and other intermediaries.¶ *Co-operative societies for obtaining implements, manures and seed of good quality at moderate prices are needed.* Similarly, the agriculturist's financial position needs to be strengthened so as to make it possible for him to withhold his produce from the market, if necessary, until prices take a sufficiently favourable turn and to relieve him of the heavy commission charges of the middleman merchant. Both types of societies have been started in India.§ This is, however, an enormous task and the progress made so far has been slow. Co-operative supply has not made much advance as business is on a small scale and there is an absence of

* This Section should be read together with sections 12 and 13 in Chap. VII and sections 9 to 16 and 21 in Chap. VII.

¶ Every farmer is, to a certain extent, a capitalist, every farmer is also a labourer, a buyer and a seller, and he is expected besides to be a highly scientific exploiter of the soil. He cannot specialise in all these functions, but he can combine with other farmers and share with them the expenses and advantages of specialisation in each branch. Trade, commerce, finance and transport are all organised and between them will squeeze from the farmer all the profits of his industry; unless he too organises and thereby controls his destiny. It is the rapid organisation amongst those with whom he deals that forces upon him the imperative need of organisation with his neighbours." Calvert: *The Law and Principles of Co-operation*, p. 50.

§ In Konkan and Deccan, societies have been started to keep and hire out iron cane-crushers to members. So also in Gujarat, co-operative power pump societies are being organised.

efficient management and adequate staff for supervision. *Special mention may be made here again of the *Cotton Sale Societies* that have been already established in Karnatak, Gujarat and Khandesh. Their progress in this untried field is necessarily slow as they have to overcome the opposition of vested interests, but the idea for which they stand is sound.

A word may be said regarding some other types of non-credit agricultural societies started in India. The principle of *co-operative insurance* has so far been applied only to insurance of cattle; farm-buildings, crops and hay-stacks being left untouched. *Cattle insurance societies* have made notable progress in Burma. It is hardly necessary to emphasise the value of such societies in India in view of her imperative need of an adequate number of healthy cattle. It is a matter of paramount necessity to minimise the heavy losses due to cattle mortality. The chief obstacles are the social disintegration of the village, prevalence of virulent cattle epidemics like rinderpest and difficulty of management and finance. The development and extension of co-operative insurance in our agricultural system must, however, be steadily aimed at. Reference may also be made to cattle breeding societies for improving the quality of cattle and for adequate provision of fodder by way of insurance against famine. The cattle section of the first Bombay Presidency Agricultural Show, 1926, has demonstrated the fact that such societies are capable of doing useful work. A few *fencing societies* have already been started, especially in the Southern Division of the Bombay Presidency, to protect the crops from the inroads of wild pigs and other pests. A small number of co-operative *irrigation societies* have been established and they offer a promising solution of the water problem in dry tracts where canal irrigation is expensive or impossible.

Another remarkable instance of co-operative activity to which allusion has already been made is the work that is being done for *consolidation of holdings* in certain Punjab villages, which has attracted the attention of economists all over India. The field of *co-operative farming* has hardly been touched. It is obvious that the successful introduction of improved husbandry

* See Annual Report of the Registrar, Bombay 1923-24.

especially so long as agricultural holdings continue to be tiny and scattered, demands joint cultivation on a co-operative basis as in Italy.

The Consumers' Movement which has achieved such striking progress in England has made very little headway in India, especially in the rural areas. Indeed, the domestic needs of the rural community are so few and they are met so effectively either out of local produce or at village bazars and the standard of living so low that distributive co-operation has hardly any scope, even if we ignore other difficulties regarding management etc. Hope lies only in the general advance of the rural masses and an improvement in their standard of living.* There is a great scope for dairy societies for the supply of pure milk at moderate prices, especially in the towns. There are a few such societies scattered about the country but a great many more are wanted.

The co-operative movement in Indian Agriculture is still in its infancy and there is any amount of highly useful work cut out for non-credit agricultural co-operation which in Denmark and other European countries has equipped the peasant so thoroughly as to enable him to compete on equal terms with the capitalist farmer.¶ As Dr. Clouston says, "The good work done by the Cotton Sale Societies in Bombay, the Irrigation and Milk Societies in Bengal, the Co-operative Seed Societies and Dairy Societies in the Central Provinces and the Societies for the Consolidation of Holdings, Clearance of Silt in canals and Sale of Farm Produce in the Punjab encourages one to hope that, given the necessary organizing staff, co-operation will play in course of time as great a part in assuring the cultivator of the full return of his labour as it has in providing him with cheap capital"‡ In order that Government may help this consummation more effectively, one of the reforms needed is a closer co-ordination of activities between the Co-operative Department on the one hand, and the Agricultural and Veterinary Departments on the other. Indeed, the co-operative societies promise to be the best agency for the propagandist

* See Mehta and Subbaiya : *The Co-operative Movement*, p. 121,

¶ See Irvine : *The Making of Rural Europe*, p. 155.

‡ Review of Agricultural Operations in India, 1926-27.

activities of the Agricultural Department. A movement in this direction has already been made in Bombay by the establishment of Divisional Boards consisting of the Assistant Registrar of Co-operative Societies, the Deputy Director of Agriculture and some non-official representatives. To carry out their work special agricultural organisers have been appointed. The actual work in the rural areas will be undertaken by the Taluka Development Associations registered under the Co-operative Societies Act.

§ 14. Non-Credit Non-Agricultural societies:—Though this movement has not yet gained sufficient strength some progress has already been made in the different provinces. (See Table on p. 342) As the Maclagan Committee found, "successful attempts have been made to arrange for the purchase of yarn and silk for weavers, cane for basket-makers, timber for carpenters, and implements (sometimes of improved pattern) for several industries, the production and sale of cotton and silk cloth, durries, and furniture. Building societies have been organised. The purchase and sale of most sorts of common necessities is being carried on at various co-operative stores." We may now discuss the various types of non-credit non-agricultural organisations.

(i) *Artisans' societies for purchase and sale* :—As in the case of the farmer so in that of the artisan, not only credit but also other needs must be organised on a co-operative basis for the improvement of the economic condition of our cottage industries which deserve every possible encouragement. *The handloom industry* is the most prominent among the small-scale industries and offers excellent field for co-operative organisation directed towards the attainment of such objects as wholesale purchase of raw material, the employment of improved looms and implements and direct sale of cloth to the consumers. The Co-operative Industrial Exhibitions held at various centres give a good idea regarding the range and variety of such co-operative products. In Bombay, the importance of co-operative weaving has been recognised by Government who are running some weaving schools under the supervision of the Co-operative Department. Some pro-

* Maclagan Committee's Report, pp. 8-9.

gress has been made in the case of other artisans such as shoemakers, goldsmiths, cane-workers, furniture makers, copper-smiths etc. Apart from the general question whether cottage industries can hold their own in the face of the modern large-scale capitalistic industries, the application of the principle of co-operation to the needs of small-scale industries can at any rate improve their resisting power.

(ii) *Unskilled labourers' societies*:—In Madras, co-operative societies of unskilled labourers are found in various districts which undertake considerable contracts for earth work, road repairs etc. requiring largely unskilled labour. They include many small ryots who have been enabled thus to increase their agricultural earnings. The difficulties they encounter are opposition of vested interests, viz., those of ordinary contractors and mismanagement. There are other societies which take up joint road construction.*

(iii) *Consumers' Societies in urban areas*:—Reference has already been made to the backwardness of this movement in rural areas. The situation is only slightly better in urban areas. A few co-operative stores have been started in Bombay, Madras, United Provinces etc. The Triplicane Stores, Madras, may be regarded as the most successful among such stores. Stores attached to College Hostels have been started with notable success in U. P. and Bombay. Taken as a whole, however, we are faced with the fact that the progress made by the Consumers' Movement is insignificant as compared to that in Western countries, especially England. There are several difficulties that must be overcome. As the Registrar of Co-operative Societies, Bombay observes, "The main reasons why several societies (consumers') have done badly are want of loyalty on the part of members, lack of good business management and proper supervision."† Other difficulties are the small margin between the wholesale and retail prices which is not sufficiently attractive to the consumers and disregard in some cases of true co-operative safeguards such as

* See the Evidence of the Registrar, Madras, before the Agricultural Commission.

† See Annual Report for 1923-24

sales for cash only, dealings with members only etc. There is no doubt that while the need of distributive stores is imperative for the benefit of the middle and working classes in towns, *the consumers' movement is the weakest part of the Indian Co-operative organisation*, and a determined effort is necessary to place it on a sound footing.

§ 15. *Housing Societies*.—Among the various efforts made in England to tackle the problem of the slums of the factory towns and to provide decent housing accommodation, co-operative housing societies occupy a prominent place. Their success in England has attracted attention in India. In factory towns like Bombay and other urban areas, we have now to face a similar problem, not to speak of the tremendous task of providing decent housing in the villages. In some of the towns of Madras, Mysore and more recently Bombay, a beginning has already been made in the direction of co-operative housing. The Government of Bombay have recently issued rules regarding financial help they are prepared to offer to building societies of various kinds. In the town of Bombay, under the auspices of the Bombay Co-operative Housing Association, a number of housing societies have been organised chiefly for the benefit of middle-class communities. So also in the Southern Division of the Presidency, two communal housing societies started on model lines at Dharwar have shown how the middle-class people can have comfortable houses at moderate cost.

Four main types of building societies may be distinguished: (a) *Land societies* which only purchase the building sites or plots for their members who build on them separately each on his own account. (b) *Mutual benefit lending societies* which build houses on a co-operative basis but with the ultimate object of enabling their members to own them. Both these types are not truly co-operative inasmuch as co-operation amongst members covers only a small part of their activity and is not intended to be permanent; they are more suited to meet the needs of the well-to-do classes. The following types are better adapted to meet the case of the poorer classes:—(c) *Tenant co-partnership societies* under which the houses are not only built jointly but are jointly owned and maintained in good condition, the necessary funds being raised by shares subscribed to by members and external

loans raised on the security of the joint house property. (d) *Societies for hiring and purchasing houses* are particularly suited to supply the need of the wage-earner in factory towns; for he cannot afford even to construct and own houses jointly with his fellows, much less to own them on his own account.*

§ 16. **Central Societies and Co-operative Finance:**—We have so far discussed the various types of primary societies. It remains now to say something about the *higher stages of the co-operative pyramid*, that have been devised to organise, supervise and finance the primary societies of various kinds. We may consider this aspect of the movement with reference to three types of Central Societies, viz., Unions, Central Banks and Provincial Banks. The following statistics show the extent of development of these three types of societies:—

(i) *Unions*

Number of Unions	No. of societies affiliated	Total no. of individuals in societies affiliated	Total working capital of affiliated societies Rs.
1,405	30,810	1,171,426	16,14,38,935

(ii) *Central Banks*

No. of Banks	Number of members.		Working capital Rs.
	Individuals	Societies.	
558	108,459	74,510	19,57,33,157

(iii) *Provincial Banks*

9	1 678	13,283	6,24,21,464
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* See Mehta and Subbaya: op cit pp. 131-33

(i) *Unions*:—"Almost all provinces in India have some central co-operative agency covering a unit very much smaller than the revenue district for supervision and assessment of credit."^{*} These are either Guaranteeing Unions as in Burma, or Supervising Unions as in Madras and Bombay, or Banking Unions as in the Punjab etc. A union consists of about five or more societies situated within a maximum radius of usually five to eight miles from the Union headquarters. *Unions are of two kinds: Supervising and Guaranteeing Unions.* The management is in the hands of a Union Committee consisting of the representatives of the various member societies. It appoints a paid secretary and a sub-committee to inspect the affairs of member societies and guides them in their working. Where the Union is also a Guaranteeing Union, the Committee further determines the total external borrowings for its member societies which it is prepared to recommend to the central financing bank, and to which it extends, under certain conditions, a guarantee regarding the bank's loans to member societies. These recommendations may be usually relied upon by the Central Bank, for the primary societies are also shareholders of the Bank. The Unions are thus useful not only in supervising the affairs of the member societies but also as forming a link between the primary societies and central financing institutions, though they themselves are not financing bodies. Such Unions have been successfully started in Burma and the movement has spread to other provinces as well. The Maclagan Committee have strongly recommended the establishment of a Guaranteeing Union where there are primary societies and central banks. They consider that it is indispensable where there is only a Provincial Bank dealing directly with primary societies. The Guaranteeing Unions started in Bombay have not proved a success, partly because in most cases the so-called guarantee was nominal and partly because funds being limited no competent supervisor could be engaged. The work of the Committee was often irregular and inefficient. § It has, however, now been decided to encourage only

* V. L. Mehta : *Studies in Co operative Finance*, p. 76.

§ See Annual Report on Co-operation, Bombay, 1923-24, p. 9; also V. L. Mehta's *Studies in Co-operative Finance*, pp. 77-78, for a fuller discussion of the question.

the Supervising Unions covering large areas and, therefore, in a financial position to provide for efficient supervision.

(ii) *Central Banks*.—Central Co-operative Banks are in general the higher financing agency necessary in a country like India where the capital locally raised by the primary societies requires to be largely supplemented from outside and distant money-markets. Hence arises the necessity of establishing higher federations which will successively connect the primary societies with the most remote towns and which will make their monetary resources available for the working capital of such societies. Such a special co-operative financing mechanism is necessary, firstly because, rural finance requires large amounts of long-term capital and secondly because, the ordinary joint-stock banks carrying their business only in a few important towns will not be persuaded to issue loans to distant rural societies of which they know next to nothing, even if they were in a position, which generally they are not, to issue long-term loans. The MacLagan Committee, therefore, advocate one central bank for each district.

The Central Bank serves as a balancing centre for adjusting the excesses and deficiencies of the working capital of the primary societies under its jurisdiction. It raises the additional capital required by the primary societies and lends it to them either directly or through Guaranteeing Unions where these exist. In some cases, the Central Bank may undertake organisation and supervision of societies, especially if, as is usually the case, they are its shareholders. The Central Bank, however, is essentially a financing agency. The area of its operation usually extends over the administrative district, though in some cases it may vary from a Taluka to a Province. Too small an area leads to unduly heavy cost of management, while too large an area to inefficient supervision. In every case, effort must be made to strike the golden mean between the two extremes.

Central Banks are of three types; capitalist, mixed and pure according to their constitution. The capitalist central banks are dominated by individual shareholders. They are practically*

† See Mehta and Subbaya : op. cit , p. 138.

like ordinary joint-stock banks and lack the true co-operative character. For some time, however, they may be necessary to provide societies with adequate working capital if it cannot be raised otherwise. Mixed central banks, consisting partly of societies and partly of individuals, offer special facilities to the former regarding share capital and representation on the board of management. Such types of banks are acceptable as a step leading to the realisation of the ideal federal type viz., a Central Bank consisting of societies only. The mixed central bank, while enlisting the advice and help of well-to-do expert businessmen and members of the middle class, safeguards the interests of societies and can itself be transformed into the ideal type of a pure central bank in which individuals are completely eliminated. The mixed type is recommended by the MacLagan Committee as being the most suitable under the present circumstances in India, and is most popular in almost all the provinces. The federal type, though theoretically the best, labours under certain handicaps, viz., inability to be entirely self-dependent in the matter of supplying the necessary business ability and failure to interest the middle class and, therefore, to attract sufficient resources to finance primary societies. In some provinces like Bengal and Punjab, there has been recently an increase in the number of federal central banks.*

As regards the *sources of the working capital*, though share capital is an important item, deposits from individuals and societies constitute the bulk of working capital in the case of both Central and Provincial Banks as can be seen from the statistics for 1925-26 given below on page 368.

For this reason, it is necessary not only to have adequate cash reserves or fluid resources, a point on which the MacLagan Committee lay special, and as many would have it, exaggerated

* See Indian Year Book, 1928, p. 418.

emphasis* but also to attract a sufficiency of long-term deposits. Central Banks should so adjust their loans to primary societies as will ensure adequate repayment for the return of deposits by the Central Banks when they fall due. To impart elasticity to the operations of the Banks, provision of facilities such as *cash credits and discounting of their co-operative paper* is necessary. This brings us to a discussion of the nature and utility of Provincial Co-operative Banks.

Constituents of the working capital of :—(see page 367)

	Central Banks.	Provincial Banks.
	Rs.	Rs.
Share capital	2,12,15,022	44,74,271
Loans and deposits from Societies	1,36,65,230	41,74,331
Provincial or Central Banks	2,84,16,606	151,06,738
Government	53,22,964	5,21,730
Individuals and other sources.	11,76,18,211	3,55,14,497
Reserve and other funds	94,95,124	26,29,990
Total	19,57,33,157	6,24,21,464

Statements: Co-operative Movement in India, 1925-26.

* The MacLagan Committee recommend that apart from the needs of current and savings deposits, which should be covered practically by a full reserve, the Central Bank should hold liquid assets up to half the total fixed deposits, a standard of one-third being held to be sufficient in the case of Provincial Banks. This has been adversely criticised on the ground that if these proportions are accepted, lending rates would have to be raised in most provinces depriving co-operation of its principal attractiveness to the small borrower. Again, the adoption of a rigidly uniform system leaves no discretion to the banks to feel the pulse of the market and act accordingly. A more workable plan would seem to be that adopted by commercial banks of standing which limit liability to eight times the owned capital. See Mehta : *Studies in Co-operative Finance*, p 132.

(iii) *Provincial Co-operative Banks*;—In order to be able to perform their functions properly, the Central Banks require the help of a *Provincial Apex Bank*, which would co-ordinate and control the working of Central Banks, serve as a clearing house to balance the excesses and deficiencies of the working capital of the latter, and act as the financial centre of the province. It would also extend to Central Banks, the facilities of cash credit and discounting above referred to. The joint-stock banks cannot be depended upon in this matter being unable to accept the particular security offered. The Provincial Bank is also a useful link between the general money-market and the joint-stock banks in the towns on the one hand, and the primary rural societies on the other. In this connection, reference may be made to an interesting development in Bengal of making the surplus co-operative money accumulated in the Provincial Bank in the slack season of agriculture, available for the needs of the outside trade and commerce through the joint-stock banks to the advantage of both the parties. The Provincial Apex Bank should be compelled to restrict its dealings to Central Banks just as the latter should be obliged to deal only with the primary societies.

Regarding the constitution of the Provincial Bank, the same considerations apply as in the case of the Central Bank. For a time, the capitalist Provincial Bank may have to be the only alternative for raising sufficient funds for supplementing the working capital of Central Banks and primary societies and ensuring the supply of the requisite business knowledge. Steps, however, should be taken eventually to secure a majority of votes to the affiliated co-operative institutions.

Provincial Apex Banks more or less on these lines have been already established in Madras, Bombay, Bengal, Bihar and Orissa, Punjab, Burma, Central Provinces and Berar and Assam. Out of these the Bombay Provincial Bank started in 1911 as a Central Bank, is unanimously pronounced to be the most efficient and its activities are multifarious. "There is no form of co-operative development or endeavour, whether of finance, propaganda or supervision, in which it does not take part."*

* Annual Report, Bombay, 1926-27.

Regarding the working capital, the necessity of a cash reserve and provision of facilities such as cash credit and re-discounting of co-operative paper discounted in the first instance by the Provincial Bank, the same considerations hold good as in the case of Central Banks.

(iv) *All-India Co-operative Bank* :—The Maclagan Committee have recommended that in addition to all the foregoing types of financing agencies, an all-India Co-operative Bank should be established to help the Provincial Banks as the latter help, in a narrower sphere, the Central Banks.* Whether conducted by the State or not, an all-India Bank of this type will necessarily require state help either directly, by Government depositing with it a part of their cash balances or indirectly by guaranteeing a certain rate of dividend to the shareholders or lastly, by requiring the Imperial Bank to provide some of the above facilities.

The Conference of Registrars convened in 1918, suggested the appointment of a special committee to go into the whole question. But in view of Government's declaration that they would appoint such a committee at some time suitable to themselves, the matter may be regarded as practically shelved for the present. Also, since the Maclagan Committee reported, opinion on the necessity or desirability of an all-India Bank has undergone considerable change. The new factors in the situation are the present superfluity of funds lying unutilised with the Provincial Banks, most of which hold fluid resources in excess even of the very high standard suggested by the Committee of 1915; the assurance of financial accommodation which many of them have

* The grounds for this recommendation are clearly brought out in the following quotation from the Committee's Report :—"There exists at present no agency in India to provide facilities for rediscounting for the co-operative banks and thereby to give their finance that elasticity without which present stability and progressive development of the movement appear to be difficult. Commercial banks will not voluntarily undertake this work and if some arrangement cannot be made with the Presidency Banks—now the Local Head Offices of Imperial Bank—by which they will undertake the duty of rediscounting co-operative and agricultural paper for the Provincial Co-operative Banks, the only alternative solution appears to lie in the establishment of a state co-operative apex bank "

succeeded in obtaining from the Imperial Bank of India or other banks; the fact that co-operation is now a transferred subject and the Provinces are anxious to retain full liberty to develop along their own lines without being fettered by any external authority such as an all-India Bank and lastly, the initiation of a spontaneous and healthy system of inter-lending which the various Provincial Banks have developed.*

§ 17. The State in relation to the Co-operative Movement:—All co-operative effort for its permanent success must in the long run be based on private enterprise and self-reliance. This, however, does not mean that the state has no function except that of watching the movement and seeing it rise or fall as the case may be. On the contrary, it is the duty of every state to offer its good offices and to act as *friend, philosopher and guide* to a movement which is recognised on all hands to be a powerful agency for bringing about social regeneration. Well-meant state-interference and assistance may of course be carried to the extent of spoon-feeding, which is objectionable, because it runs counter to the very bed-rock principle of co-operation that people must achieve their salvation through their own efforts as far as possible. On the other hand, the state's fear of the evils of excessive interference may lead it to adopt a policy of extreme *Laissez-Faire* amounting to callous indifference and unconcern, and the essence of statesmanship consists in steering clear of both these extremes and not to grasp each virtue so hard as to transform it into its opposite vice. The precise amount of state-interference and help called for in any case will depend on the special circumstances of each country. In India, owing to the wide-spread ignorance of the masses, the tradition of state-interference to which they have been accustomed and the urgency of the problem of rural credit, Government have very properly taken a vigorous initiative in the Co-operative movement. Equally properly, they have refrained from the policy of financial spoon-feeding, which as the experience of France shows, does more harm than good. From this point of view, private enterprise as measured by the growing volume of the working capital engaged in the movement has

* See Mehta : *Studies in Co-operative Finance*, pp. 166-170.

been strikingly successful in the short time that has elapsed since 1904. We have already shown that the state has conferred on co-operative institutions certain fiscal and judicial concessions and granted limited financial help to new societies. In Bombay, the Government have gone a few steps further with ample justification for their policy. In the first place, they have extended a guarantee of interest at 4 per cent on the debentures issued by the Bombay Provincial Co-operative Bank up to a maximum amount of 20 lakhs of rupees. This concession has enabled the Bank to raise the much-needed long-term capital for rural finance at a moderate rate without any drain on the funds of the Government, who are not likely to be called upon to make good the guarantee on account of the safe character of the business of the Bank. In the second place, Government have adopted the policy of advancing Tagavi loans for permanent improvements of land through the agency of the co-operative societies.

Turning to the policy of the Government as regards guiding and controlling the movement, it has been on the whole a sound one. For instance, in negating the demand made in certain quarters for the devolution of some of the duties of the Registrar on the District Officer, Government have rightly agreed with the Maclagan Committee, who deprecate excessive official interference and lay down that, "the correct position of such servants as the Collector would be to stand as well-wishers equipped with the requisite knowledge and sympathy and to refrain from having any intimate connection with the management or assuming any direct financial responsibility." The State has often clearly expressed its wish that its servants should not have any large interest in such matters. An exception, however, seems to be implied as regards the relation between the Co-operative Department and the movement of Co-operation. While the original policy was progressively to relax the hold of the Department and to make the Registrar ultimately little more than a registering officer as the societies became self-reliant and private enterprise was capable of standing on its own legs, it does not seem to have been consistently carried out. If anything, the position of the Registrar is becoming one of increasing

dominance and the dry-nurse element in his duties is not showing any signs of disappearance. And the Maclagan Committee unfortunately appear to put the seal of their approval on this retrograde policy. They* recommend that the Registrar should wield the power of the "money stick", that is to say, should control the maximum borrowings of all classes of society and adoption of rates of interest and that he should supervise the work of the establishment for the preaching of co-operative principles and control the primary audit of societies conducted non-officially. In addition to the Registrar, they propose the appointment of a Joint Registrar for every 100 societies. The Committee hold that, in general, the continued development of Co-operation in India on any other condition than the permanent maintenance of an efficiently and highly paid staff of Registrars cannot be contemplated. Now these recommendations, particularly regarding the position of the Registrar seem to be inspired by misgivings as to the potentialities of the movement and imply a distinct recantation of the originally announced policy of Government. Further, they seem to be unwarranted in view of the present dimensions of the movement, which has now really outgrown the stage of leading strings. In any case, even at the risk of some inefficiency, the policy ought to be to encourage responsible private enterprise and to deofficialise the movement as far as possible so as to make it self-reliant. For this purpose, the Madras plan of conferring the status of an Honorary Assistant Registrar on non-official organisers appears to be a step in the right direction. Another way to make the movement more non-official in character, would be to give all possible encouragement to non-official bodies like the Bombay Central Co-operative Institute or the Federation of Central Banks in C. P. and to delegate to them some of the functions of the Registrar in the matter of supervision, organisation and audit of societies and to stimulate them to carry on propaganda by holding conferences, arranging training classes for Society office-bearers and the general public, conducting journals and generally devoting themselves to rural reconstruction work. An official audit at suitable intervals may be

* Cf. Mehta and Subbaiya : op. cit. p. 170.

retained as a healthy check on the affairs of the societies and to ensure public confidence. While the great importance of an efficient supervision and audit for the success of the movement may indeed be granted, it is not sound policy to achieve this through an official agency.

Speaking of Bombay, we may say that there are welcome signs of withdrawal of official control and encouragement of non-official agencies. The recent Bombay Co-operative Act has recognised the Bombay Central Co-operative Institute, which under a non-official President serves to focus the co-operative activities of the Presidency including the holding of the Provincial Co-operative Conferences. The Institute, which had 5,337 members (4, 382 societies and 995 individuals) on 31st March 1927, receives a handsome grant from the Provincial Government for its threefold work of propaganda, training and publication of co-operative literature. It has several divisional and district branches to carry out its work in the Presidency. Unlike Provincial Co-operative Unions which are the final federations of all societies, being entrusted with definite duties of audit and supervision and enjoying a definite legal status, the Bombay Institute is a body mainly for propaganda. Whether a co-operative service should be organised by other co-operative agencies such as Central Banks and whether the Institute should in time be federalised as Supervising Unions develop, are problems for future study and solution.

Further, while the Bombay Institute is doing excellent propaganda work, " it has not yet fulfilled to any degree its additional objects of the systematic study of co-operative problems and of contributing expert knowledge and advice on the more specialised sides of the movement, " The development of a non-official agency to take charge of the co-operative movement and relieve officials of the Department of their present duties is a desideratum

* See Annual Report of the Registrar, Bombay, 1926-27.

towards the attainment of which future policy ought to be directed in all provinces.§

§ 18. A critical estimate of the Co-operative Movement in India:- The Co-operative Movement in India has not indeed succeeded in curing all the economic and social ills from which the country is suffering to day. On the other hand, it has by no means been altogether barren of valuable results. In the first place, owing to cheaper credit made available by co-operative societies, much saving, estimated at about a crore of rupees, has been effected by the agricultural and artisan classes; and it is not unduly optimistic to expect that, in the not too distant future this figure would multiply itself many times over, especially if other forms of co-operative organisation intended to provide long-term credit came into existence. Co-operation, moreover, has substituted a system, under which credit is controlled and debt restricted, for the money-lender's demoralising system of dangerously facile credit. In several places, co-operation has successfully undermined the predominant position of the money-lender who has been compelled to bring down his rates of interest.* In the matter of debt redemption, although much still remains to

§ The recommendation of the Maclagan Committee for the appointment of a Rural Development Commissioner in each province for the co-ordination of the Departments of Agriculture, Industries and Co-operation has not been carried out. This is a wise decision in view of the possibility of placing all these Departments under a single Development Minister of the Provincial Government. Another recommendation of the Committee in favour of the appointment of an Adviser on Co-operation with the Government of India has not been given effect to. It is not clear how such an appointment would serve a useful purpose without introducing an element of rigid uniformity and leading to an undue centralisation of the movement. Occasional conferences of Registrars of the various provinces are sufficiently adequate to the need of co-ordinating the co-operative experience of the various parts of India.

* "In hundreds of villages the ascendancy of the money-lender has been definitely broken, and in many the members of the local village bank owe him nothing at all. To such men co-operation has meant little less than a revolution, not the kind that ends in license, bloodshed and chaos, but the kind that develops energy, straight dealing and self-reliance." Darling: *op cit*, p. 261.

be done and it has been doubted whether co-operation of itself would ever be equal to the colossal task of ridding the peasantry entirely of its burden of indebtedness, something has nevertheless been achieved in this direction. As Mr. Darling writes, "The co-operative movement might be regarded as a new form of communal life to protect the peasant from within and without his gates, in the place of the old communal life of the village which prevented the cultivator from being exploited."* Further, with the progress of co-operation, the banking habit is slowly but steadily developing in rural and urban areas and the hoards that were lying unused are gradually coming into fruitful employment. Agriculture, the premier industry of the country, has benefited in a variety of ways by co-operation, which has facilitated the work of the Agricultural Department in popularising improved seed and cattle, cheap manures and implements and, in general, helping the realisation of the ideal of "better farming, better business and better living."† The alliance between co-operation and agriculture is pregnant with great possibilities. "Wherever agriculture and co-operation have experienced the assistance which each can derive from associating with the other, they are fast developing a truly organic connection and there can be little doubt that before many years this will be the case throughout India." Co-operation has also made important beginnings in dealing with problems of rural sanitation, provision of suitable medical facilities in rural areas etc.

Societies started for special non-agricultural purposes, though as yet on a small scale, are doing useful work in their respective fields. The condition of factory labourers, depressed classes and employees of all sorts is being gradually ameliorated under the benign influence of co-operation. Cottage industries, notably the handloom industry, are receiving the support and the assistance of the movement. Finally, as Sir Theodore Morison points out, the Co-operative Movement has served to counteract the tendency towards rural depopulation in certain parts of the country.

* Darling : op. cit p 282.

† See Government of India's Resolution on Co-operation, 17th of June 1914.

Not the least important of the advantages of co-operation in the widest sense of the term, are intellectual and moral, and wherever co-operative societies have been started they have generally not failed to yield these advantages. "It is difficult to give conclusive evidence of this (moral progress) as the signs of moral progress are too illusive to be pinned down in a statement of facts; but for all that they are unmistakable to close observers of the movement. Litigation and extravagance, drunkenness and gambling are all at a discount in a good co-operative society and in their place will be found industry, self-reliance and straight dealing, education and arbitration societies, thrift, self-help and mutual help." ‡ The movement has created a keen desire for education and literacy and even persons fairly advanced in age have been found to seek its benefit. It has also improved character and the general tone of morality and promoted the development of a feeling of "*all for each and each for all*" among the village folk. In short, the Co-operative Movement bids fair to be a powerful instrument for the revival of the old corporate life of the villages and restore their vitality.

It must, however, be admitted that all these benefits—moral, educational as well purely economic—have been secured only on a small scale. For example, much yet remains to be attempted and achieved in the field of non-agricultural co-operation. Even agricultural co-operation is practically confined to the sphere of credit and here too, as Sir Visvesvaraya remarks, "all that has been done amounts only to a scratching of the surface."

It is also clearly necessary that we should recognise, in order to be able to remedy them, the various defects in the actual working of the co-operative movement in India today, such as unpunctuality of payments, fictitious payments, *benami* loans, nepotism, red-tapeism and unnecessary delays in issuing loans etc. Managing Committees are too often allowed to usurp all power to the detriment of the rank and file of the members, many of whom

‡ Darling : op. cit, p. 274.

* *Reconstructing India*, p. 185.

believe that the co-operative movement is merely a state-managed affair and that it is the government money which they borrow from their society. The failure of many of the members properly to understand the aims and objects of co-operation engenders in them an attitude of apathy and indifference which is fatal to the movement. Many members again take only a mercenary view of their society, which they regard merely as a cheaper substitute for the village money-lender, and are thus unable to identify themselves with the movement in the whole-souled manner that is essential for its success.

All these defects must, however, be squarely faced and tackled resolutely. Co-operative workers must not despair of the movement because the results so far have not been commensurate with their enthusiastic expectations. They must keep their faith bright in the gospel of Co-operation which has worked such wonders in other countries and work more strenuously than ever to make it a success in this country.

LAND MORTGAGE BANKS.

§ 19. The need for Land Mortgage Banks:—Nearly a quarter of a century has passed since the inception of the Co-operative Movement. The experience gained during this long period has compelled the advocates of the movement to moderate their original expectations in regard to the possibility of wiping off the colossal indebtedness of the rural classes through its agency. It is now being realised that the ordinary Co-operative Credit Societies alone will not be able to cope with this stupendous problem and that they must be supplemented by other kinds of organisation dealing specifically with the problem of rural indebtedness.

In order to bring about the permanent release of the agriculturist from his indebtedness, loans for sufficiently long periods are necessary. They are also required for enabling the agriculturist, big or small, to effect costly but profitable improvements. The Co-operative Societies are unable to meet adequately either of these requirements and the utmost they can be expected

to do is to supply the current capital needs of the agriculturist. Hence the necessity of starting special institutions like Land Mortgage Banks.*

§ 20. Land Mortgage Banks and Co-operation:—The objection has been raised against Land Mortgage Banks that they are bound to be capitalistic concerns and that they are devoid of the moral or educative value of co-operative associations. But even if we grant the truth of this contention, there is no escape from the position that, *since old debts are a serious obstacle to the economic regeneration of the ryot and their extinction is a task beyond the capabilities of the Co-operative Movement in its ordinary forms, as also the almost equally important task of financing permanent improvements, other devices suitable for this purpose, though lacking in some of the characteristic virtues of Co-operation, must be resorted to.* We must further remember that the existence of prior debts on the present scale prevents the realisation of the full benefits of Co-operation itself. Anything, therefore, that tends to cure the malady of indebtedness and to strengthen the economic position of the ryot must be regarded not as a rival but as *an indispensable ally of Co-operation.* Moreover, the alleged differences in basic principle between Land Mortgage Banks and the Co-operative Credit Societies are capable of being eliminated by *organising Land Mortgage Banks according to co-operative principles.* Mr. Strickland puts the case for Land Mortgage Banks thus:—"Village societies for comparatively short-term credit cannot appropriately issue large or long-term loans from their own resources, and such loans as are given by village societies for the purpose of improving cultivation, redemption of old mortgages, or clearance of hereditary debt must either be limited to petty advances for short periods, or if more gener-

* Nicholson writing in 1895 did not think that Land Mortgage Banks were suited to the ryots. "The *clientele* of the banks, he said, will consist of very small folk requiring very small loans; no land bank can deal in such business, for the cost of enquiries, the risk of bad business, the worthlessness of petty parcels of land to a central bank, prevent a land bank from dealing with such folk." Opinion in this respect, however, has undergone a change and the utility of Land Mortgage Banks even for small farmers is now almost universally recognised.

ously given against a land mortgage, will lock up the funds of the tiny community for a dangerously long term to the detriment of the general body of members. A mortgage institution is, therefore, needed to supplement the society of short credit.”*

§ 21. History of Land Mortgage Banks in India:—It is not necessary here to give a detailed history of the proposals for Land Mortgage Banks made from time to time.† As early as 1863, a company called the *Land Mortgage Bank of India, Limited*, with the sub-title of *Credit Foncier Indien*, was registered in London being based on the model of the French *Credit Foncier*. The Company had its agents in Calcutta, Bombay and Madras and sub-agents in all the principal cities, towns and districts of Bengal, Madras, Bombay, Oudh etc. Loans were given for a period of seven years at a time at 7 to 8 per cent interest. The Bank made a good beginning and had a flourishing career of about twenty years. It appears, however, to have gradually declined owing, among other reasons, to its large advances against tea, the price of which was then declining, the non-fulfilment of its expectation regarding the extension of Permanent Settlement to the whole of the country and the appearance of rivals like the Loan Offices in Bengal which began to advance money to the landlords.§ Perhaps, we need not after all regret the failure of this European enterprise in the sphere of land mortgage banking, for we agree with Prof. Sapre in thinking that the objections urged by the Punjab Government in 1908 remain as forceful today as they were twenty years ago, viz., that the facilities for debt would be encouraged, secondly, that the bank would have to work with an English agency and the interest would be too high, seeing that the bank would gain the assistance of Government officials and lastly, that it was politically objectionable to place the welfare of the people in the hands of a powerful bank with its head quarters in London and in a position to influence the Secretary of State.¶ The un-

* Strickland : *Studies in European Co-operation*.

† For the earlier History of Land Mortgage Banks see Prof. J. C. Sinha's Paper on Land Mortgage Banking read before the Indian Economic Conference, Lucknow, 1928.

§ See Sinha's Paper. op. cit

¶ See Sapre: *Essentials of Indian Economics*, p. 226

successful project of a *Land Bank for the Poona District* suggested by Sir William Wedderburn in 1883 has been already described. Sir Frederic Nicholson thought (1895) that Land Banks were not suited to, nor needed by the ryots of the Madras Presidency. Mr. Dupernex in his *People's Banks of Northern India* (1900), advocated Land Mortgage Banks for the benefit of the encumbered estates in the United Provinces. Sir Dinsha Wacha has all along been a strong advocate of Land Banks of the Egyptian type, which he regards as the only satisfactory solution for the problem of rural indebtedness. In 1919, Sir James Meston, the then Finance Member, spoke in favour of Land Banks started very largely by local enterprise and maintained under local supervision and control by groups of intelligent landlords; but at the same time he pointed out that it was not advisable for Government to undertake work of this sort on a large scale. Most of the earlier schemes, it will be observed, did not contemplate the grant of loans to the ryots on the security of their holdings, being for the most part intended for the bigger landlords.* Opinion in this respect has, however, changed since and the establishment of such Banks for the benefit of the ryots may now be regarded as the official and non-official creed in India which was also recently (1926) adopted by the Bombay Registrars' Conference. Punjab had the honour of giving the lead in this matter and its first Co-operative Land Mortgage Bank was started in 1920 at Jhang. Madras, Bengal and Burma have also taken steps to inaugurate such Banks and Bombay is about to start two such institutions for the Dharwar and Broach Districts to begin with. Some of the more enlightened Indian States like Baroda and Mysore have fallen into line with British India and are considering schemes for the establishment of Land Mortgage Banks.

§ 22. Example of Germany:—The experience of European countries in regard to this important question of land credit is valuable as affording useful lessons for India. We will here refer briefly to the example of only one country, Germany, where

* It may be mentioned, however, that Khan Bahadur Sayad Ahmed advocated Agriculturists' Relief Banks for assisting the ryots, in his Memorandum on Agricultural Banks included as Appendix I to the Report of the Indian Famine Commission of 1880. (See Sinha's Paper, op. cit.)

much attention has been devoted to this problem. Land Mortgage Banks in Germany are based on the idea of substituting organised mortgage of land for individual pledging of land in which the debtor and creditor deal directly with each other. "The Land Bank serves as an intermediary between the estate needing credit and capital seeking investment by issuing land mortgage bonds payable to the bearer and secured by the credit and the assets of the Bank"* The advantage of this plan is that the Bank obtains money at low rates of interest being in touch with the wider money-market. Moreover, it is able to attract savings not only from the agrarian but also the non-agricultural districts. These German Banks (Landshaften) are public institutions and are helped and controlled by the State in several ways, the general object being to offer better facilities and privileges to the Bank as a mortgagee than are available to the ordinary mortgagee. The legal connection between the mortgage bonds and the hypothecated estate which supports them is guaranteed by a special commission of control. This is a highly successful instance of the mobilisation of agrarian credit and may be found suitable for Indian conditions with certain modifications.

§ 23. State help for Mortgage Banks:—We need hardly emphasise the value of state help for the successful working of the Land Mortgage Banks in India. State assistance may be given in the form of a guarantee for the repayment of both the principal and interest, purchase by Government of a portion of the debentures or bonds pledged against land, declaration of such bonds as Trust Securities, grant of special facilities and privileges to the Bank as a mortgagee as in Germany and the grant of concessions similar to those enjoyed by Co-operative Societies. In the absence of such state-aid, the Land Banks are not likely to be able to sell their bonds in the market at a reasonable price and a moderate rate of interest. The successful issue, by the Bombay Provincial Co-operative Bank, of debentures of the value of ten and a half lakhs of rupees enjoying a guarantee, by the Secretary of State, of interest at 4 per cent may be regarded as an encouraging precedent in this connection.

* See K. T. Shah: *Indian Currency, Exchange and Banking*, pp 407-09.

§ 24. The Madras and Bombay Schemes :—An examination of the Madras and Bombay Schemes of Land Mortgage Banks organised on co-operative lines will indicate the general lines of the constitution, finance and management of such Banks.

(i) *Madras scheme* :—“The primary object of the present scheme is to facilitate the redemption of mortgages of agricultural land and thereby to afford relief to the ryots who are encumbered with mortgage debts.....Amongst the objects of the Land Mortgage Banks, will be included the improvements of agricultural lands and of methods of cultivation. All loans to members of the proposed banks will be secured on the mortgage of agricultural land and the bulk of the working capital will be obtained by the issue of debentures secured on these mortgages.” The Government of Madras have undertaken to take up half the debentures to the maximum amount of two lakhs of rupees, provided at least debentures of an equal amount are taken up by the general public. This form of State-aid will create confidence and induce the public to take up the debentures of Land Mortgage Banks. In addition to debentures and deposits (accepted for not less than three years), a portion of the working capital consists of share capital, the value of the shares being kept low so as to enable the small cultivator to join the Bank.

A limited area of operation restricted to a group of villages within 6 or 7 miles from the headquarters of the Bank, is desirable so as to ensure some degree of mutual knowledge and to facilitate the indentification and valuation of the land to be mortgaged to the Bank without the help of professional experts. A number of ryots who own landed property in this area and who have mortgaged land to the money-lenders may combine to form a co-operative Land Mortgage Bank. “They will re-mortgage their lands to the Bank which will proceed to issue debentures on the security of these mortgages. These debentures will be sold in the open market and the sale proceeds will be utilised by the Bank in lending to its members in exchange for their mortgage deeds.... The total value of the debentures will not exceed the amount covered by the mortgages given by the members of the group for whom a particular series of debentures

is issued." The period for which debentures will be issued will ordinarily be not less than 12 and not more than 20 years. The rate of interest to be paid on debentures will for the present be fixed at 7 per cent. The Board of Directors of the Bank will appoint a Trustee whose function will be to see that the Bank fulfils its obligations to the debenture-holders....The proposed Land Mortgage Banks are to be organised on a limited liability basis.....as no person can be member of two unlimited liability societies at the same time. (These banks can only be started in areas where unlimited liability credit societies are already at work.) The value of the land mortgaged as security for a loan must be at least twice the amount of the loan. †

(ii) *The Bombay Scheme*:—In Bombay, it is decided to provide for long-term loans to agriculturists for the following purposes:—(a) The redemption of lands and houses of agriculturists; (b) the improvement of land and methods of cultivation; and (c) The purchase of costly agricultural implements and the purchase and installation of agricultural plant and machinery.

"The machinery of organisation will consist of the Provincial Co-operative Bank as apex bank and primary units consisting of local Land Mortgage Banks (or Associations). The Provincial Co-operative Bank will take up the work as one of its ordinary activities without any change in constitution or organisation. It will provide the main source of finance by raising debentures of the value of Rs. 9½ lakhs at 4 per cent. In order to lend support to the scheme Government will purchase debentures to the extent of Rs. 5 lakhs at such discount as will ensure that they do not lose on the transaction.

"The area of the local unit of operation will be a fairly large tract which will ordinarily be a revenue district, but it need not necessarily be co-terminous with one. The members of the

† See the Draft Scheme submitted by the Registrar, Madras, in his Letter to the Secretary to the Government, Development Department, 1st June 1924.

local banks or associations will be holders of agricultural land who are borrowers and other members nominated by Government. Each borrower will subscribe to shares in the proportion of nine-twentieths of his borrowings. The money thus borrowed will not be kept by the local bank. It will be either invested in Government securities and the securities deposited with the Provincial Bank or it will be directly invested with the Provincial Bank at the best rate of interest the Bank can give. The local banks will thus have no concern with finance beyond receiving and investing the share money and acting as intermediaries for advancing the loans to borrowers, and the whole business of finance will to this extent be done by the Provincial Bank. Each local bank will require an expert valuer of land. He will be of the status of an Aval Karkun and will for the present be supplied and paid by Government. Loans will be made on first mortgages up to a limit of 50 per cent of the value of land mortgaged.* The Bombay Government have only provisionally sanctioned the scheme and, it seems, are awaiting the publication of the report of the Agricultural Commission before they accord their final sanction to it. It is only a tentative scheme, as shown by the fact that the agency of the Provincial Bank is to be utilised for carrying it out. The general plan of the scheme, however, appears to be wisely devised. While the local Land Banks will make the necessary local inquiries and exercise control over local borrowing, the central agency will be entrusted with the issue of debentures and control over the financial working of the scheme which will receive a good start from the Government. A wide market for the debentures and public confidence in the working of the local banks will thus be ensured. As these develop on sound lines, the agency of the Provincial Bank may be replaced by the creation of an Apex Land Mortgage Bank having the local units as its constituents. In the meanwhile, it is perhaps desirable to organise a separate Land Mortgage Department of the Provincial Bank.

*See "The Times of India", 12th October 1927 and the Bombay Registrar's Correspondence with the Bombay Government regarding the Draft Scheme.

These new experiments for the better mobilisation of land credit will be watched with considerable interest by all those who are anxiously casting about for means to emancipate the Indian ryot from his present bondage to the money-lender and enable him to grow two blades of grass where he grows one at present.

CHAPTER XI

AGRICULTURE : (Continued)

THE STATE IN RELATION TO AGRICULTURE.

§ 1. Need for State aid :—While it has been a matter of controversy whether and how far the state should actively assist the industrial development of the country, the necessity of its concerning itself with the amelioration of the cultivator's position and the improvement of the agricultural system has been definitely recognised by the state for a long time. Having regard to the numerous weaknesses of the agricultural system, the poverty of the ryot and the fact that, as much as nearly 75 per cent of the population is dependent upon agriculture, it is of paramount importance that the State should follow a vigorous ^{and} ~~final~~ ^{constructive} policy for the advance of agriculture. From ^{the} ~~the~~ financial point of view, the interests of the state clearly lie in the direction of increasing the wealth and the tax capacity of the numerous rural population of the country. It is, in which, for as far ahead as one can see, agriculture ^{will} ~~will~~ always occupy a predominant position.

§ 2 The evolution of the Agricultural Departments:—We will first trace briefly the growth of the special organisation which Government have called into existence to enable them to discharge effectively the various duties connected with agricultural development.

The idea of improving agriculture by means of a special Government Department was first mooted in connection with Mayo's Famine of 1866. It was later on taken up by Lord Lytton's Government but materialised only in 1884 as a result of the recommendations of the Famine Commission of 1880 and, also add, of the representations of the Lancashire Cotton Industry whose interest in the growth of long-staple cotton in India is easily understandable. Agricultural Departments were

*For a more detailed account see *Indian Agriculture*, by J. Mackenna.

established in the various provinces under Directors, Deputy Directors, Superintendents and Overseers. Although the earlier idea was to take up agricultural enquiry, famine relief and land improvement, little was done beyond a certain amount of statistical work. Unfortunately, the Departments were saddled with a good deal of work not properly belonging to them, e. g., the work of keeping Land Records and the supervision of land registration. They were also further handicapped by the meagre grants allotted to them.

In 1889, the Secretary of State sent out Dr. Voelcker of the Royal Asiatic Society to enquire into and report on the possibility of applying the results of research in chemistry to Indian agriculture. We have already referred to the remarkable testimony he has borne to the industry, capacity and character of the Indian ryot. He held the opinion that Indian agriculture was also primitive and backward as often alleged but that it was ill-equipped from the point of view of modern agricultural practice, and emphasised the value of agricultural education and improvement. The forces of the Department were in the meanwhile improved by the princely donations given by Mr. Phipps, an American visitor, and Sir Sassoon David. In 1901, an Inspector-General of Agriculture was appointed to advise the Imperial and Provincial governments. This for the first time gave the Imperial Agricultural Department the services of an expert head in agricultural matters. The post was abolished in 1912 and its duties were entrusted to the Director of Agricultural Research Institute, Pusa, which was established in 1903 together with a College for more advanced training and special short practical courses. It was in 1905 that, thanks to the tireless zeal of Lord Curzon, the organisation of the Departments which they improved, they were relieved of the extra work with which they had been burdened and larger funds were set apart for the development of agricultural experiments, research, demonstration and instruction. The Agricultural College at Poona was started in 1908 together with a Research Institute to relieve the congestion in the agricultural classes attached to the Science College, Poona, from 1878 onwards.

As a result of the rapid extension in recent years of the use of agricultural machinery, especially for irrigation, Agricultural Engineers have been appointed to advise cultivators and to arrange for the installation of the necessary machinery. Lastly, an All-India Board of Agriculture was founded in 1905 with the object of bringing the Provincial Departments more in touch with one another and to discuss at their annual meetings programmes of agricultural work and make recommendations to the Government of India. The centralised control by the Government of India over Provincial Departments has been considerably relaxed as a result of the Reforms and since 1921 agriculture has become a transferred subject under a Minister. The Government of India now concern themselves only with agricultural problems of all-India importance and maintain the following institutions under the administrative control of the Agricultural Adviser to the Government of India:— (1) Agricultural Research Institute Pusa; (2) The Imperial Institute of Veterinary Research, Muktsar; (3 and 4) The Imperial Institutes of Animal Husbandry and Dairying, Bangalore and Wellington; (5) The Cattle-breeding Farm, Karnal; (6) The Creamery at Anand; (7) The Imperial Cane Breeding Station at Coimbatore; and (8) The Sugar Bureau, Pusa.*

To supplement the work of and to co-operate with the Agricultural Departments, certain official and non-official bodies have been started, viz., the various District Agricultural Associations and, more recently in Bombay, the Divisional and the Taluka Development Boards, consisting of representatives of the Agricultural and Co-operative Departments and the non-official public have been established and serve to co-ordinate the work of the two Departments. In fact, the future policy in the Bombay Presidency is to use both the Co-operative Department and the non-official machinery for the promotion of the work of the Agricultural Department.

As to the work of Provincial Departments, it may be classified as follows:—(1) Experiment and research on agricultural farms and laboratories:—The importance of research cannot be

* The Indian Year Book, 1928, p. 329.

overrated considering the enormous value of the interests at stake and the only limit to expenditure in this direction is that set by the extent of the financial resources available. We may here remark that the greatest care is necessary in the selection of a competent personnel for carrying on the work of research. It is necessary that only merit should be the governing principle of selection which should be irrespective of race, colour and creed. We believe that, given a fair opportunity, Indians are fully capable of giving a good account of themselves in the matter of research and every facility should be provided for training them in the methods of modern research and entrusting them with responsible work. We may also further observe that when the services of foreign experts are required there is no reason why the choice should be confined to Englishmen alone. We should cast our net as wide as possible and bring under contribution trained brains and expert ability wherever we can find them though, in order to strengthen the sentiment of imperial solidarity, we may give preference to England whenever we can do so consistently with the best interests of the country. In other words, the same principles that ought to govern our purchase of goods and stores, should apply to our purchase of services. Of the many expectations entertained about the Royal Agricultural Commission, one is that it would give a phillip to agricultural research and point out the most effective methods of organising it.

(2) Demonstrations of succesful experiments to the cultivators and propaganda to get the improvements adopted in agricultural practice :—In our survey of the principal crops of India we have already noticed the useful work that has been done by the Agricultural Department, especially with reference to wheat sugarcane, groundnut, cotton, tobacco and fodder crops.* Jute, potatoes, rice, etc. are some of the other important crops which are engaging the attention of the Department. The amount of the work done so far, however, is small and the vastness of the ground yet to be covered will be seen when we reflect that out of a total sown area of 79 million acres under rice, less than 1 million acres is under higher yielding varieties of paddy. In the case of wheat, the position is somewhat more satisfactory as,

* See p. 201-215 above.

out of a total area of about $31\frac{1}{2}$ millions, nearly 3 million acres are under improved wheats. With regard to cotton, the figures are 23 millions total area and over $3\frac{1}{2}$ millions under improved strains. This relatively satisfactory situation is due to the work of the Central Cotton Committee which has its own separate finances, and indicates the necessity of creating similar bodies for the improvement of other crops as well. As regards jute, 15 per cent of the total area in Bengal has been put under improved varieties.*

We may here refer to the complaint often made to the effect that the Department has hitherto concentrated its reforming energies on the export crops, to the comparative neglect of non-export crops like Jawar, Bajra, fruit and vegetables, which are quite as important both from the point of view of food requirements of the population and the profit of the agriculturist.

(3) Demonstration of improved implements and machinery and their introduction into practice:—We have already referred to what has been attempted and achieved by way of popularising iron ploughs and sugar-cane crushers and pumping machinery etc. Demonstrations of new methods, improved implements etc. are carried on Government farms or on the fields of the cultivators.

(4) Production, maintenance and distribution of pure seeds of improved varieties of crops, introduction of new and artificial manures etc.

(5) Investigations have also been set on foot under Departmental auspices with regard to the reclamation of saline lands, the conservation of soil moisture, the movement of nitrates in the soil, storage of farm-yard manure, the efficiency of different ways of green manuring, the solubilisation of mineral phosphates, the control of insect pests and diseases of crops, and the problems relating to animal nutrition.†

It has been claimed that as a result of Departmental activities the value of crops has been raised by $10\frac{1}{2}$ crores annually.

* See Review of Agricultural Operations in India, 1926-27.

† See India in 1926-27, pp. 134-135 and Indian Year Book 1928, p. 329.

At the same time we must confess that, while the Departments are doing useful work and are gradually gaining in knowledge and experience, the work that has been done is as a drop in the ocean when compared to what remains to be done. The slowness of the progress may be due partly to red-tapeism which the Agricultural of all Departments must endeavour to shake off. Among the principal reasons, however, are the inadequacy of the capital at the command of the agriculturist, the insufficient irrigational facilities and the general ignorance and conservatism of the people. To these must be added the *paucity of funds placed at the disposal of the Agricultural Department*. The net expenditure of the Imperial and the Provincial Departments of Agriculture amounted, during the year 1926-27, only to 103½ lakhs of rupees, which works out at nine pies per acre of cultivated area and eight pies per head of population in British India. Only about 1 per cent of the revenues of the country is spent on the development of its chief and basic industry. Surely, agriculture deserves a more liberal measure of help than has been hitherto accorded to it. The United States of America spends about eleven times as much on its Federal and State Departments of Agriculture as India does and yet only 30 per cent of the American population is engaged on the land. Even Japan with a population of 59 millions spends five times as much as India on agricultural improvement.*

§ 3. Other items of State aid:—We may now proceed to review the other measures taken by the state in aid of agriculture. These may be conveniently summarised under the following heads:—(i) ‡ *Land policy*: The salient features to be noticed in this connection are the *security of title* to the land conferred upon the agriculturists; also the *protection granted to tenants* in Zamin dari areas by special legislation—legislation which may well be imitated in the Rayatwari areas where also the need of protecting tenants has begun to be felt. Among other privileges conferred by the State on the cultivator, has been that of *freedom of transfer* which, however, as we have seen has not proved an un-mixed blessing. With regard to *land revenue policy* this will

* See Review of Agricultural Operations in India, 1926-27.

‡ See Keatinge: *Rural Economy in the Bombay Deccan*, Chapter 13.

come under examination in a separate chapter. State assistance in the shape of *direct Government construction of irrigation works* and the grant of *Tagavi loans* for enabling the agriculturist to undertake various permanent improvements on his own behalf has already received detailed notice in a previous chapter. Allusion may, however, be made here to the fresh departure made by some Provincial Governments in appointing special *embankment officers*. The experiment initiated by the Bombay Government for providing the ryot with reasonably sized and shaped holdings has been already fully discussed.

(ii) *Tariffs*:—One aspect of tariff manipulation, viz., export duties on food stuffs, raw materials and manures has been discussed and the bearing of the various proposals in this connection on agricultural prosperity has been made sufficiently clear. As regards import duties, the question is of very little practical interest, because there is hardly any foreign competition worth the name, which the agricultural products of the country have to face. The only exception is sugar. The question of *protecting the refined sugar industry* by a higher import duty than exists at the present moment is sufficiently important to form the subject of anxious deliberation and inquiry by the Tariff Board.

(iii) *Credit*:—The part which the State has played and might continue to play in the matter of provision of agricultural credit has been dealt with in the last two chapters.

(iv) *Equipment*:—The propaganda carried on for the introduction of improved implements and the efforts made for the improvements of cattle breeds have been already noticed, as also various activities of the Veterinary Department for preventing and curing cattle diseases.

(v) *Co-operation*:—The possibilities of the Co-operative Movement as an aid to rural reconstruction are so great that it is in the fitness of things that the State should closely associate itself both with the initiation and subsequent progress of the movement. We have had a good deal to say on the future lines of co-operative work in this country and the manner in which Government might help it.

(vi) *Marketing*:—The vital importance of an efficient

marketing organisation enabling the agriculturist to get a fair price for his produce is winning its way to Government recognition as is indicated by the recent legislative activity embodied in the Cotton Transport Act etc.

(vi) *Education*.—The general principles governing the problem of rural education in its relation to agricultural efficiency have been already indicated. It now remains to give some account of the educational machinery provided by the State*:

(a) *Agricultural Colleges*.—There are at present six colleges established in the different Provinces at Poona, Coimbatore, Nagpur, Cawnpore, Lyallpore and Mandalay. They are intended to train the future personnel of the Agricultural Department as well as to provide teaching in modern methods for those actually engaged or intending to be engaged in farming either as land-owners or agents. Moreover, they are the provincial centres for scientific research in agriculture. Apart from full degree courses, the Colleges also provide short courses of one or two years leading up to a diploma or certificate in agriculture. These courses are meant for practical agriculturists, but incidentally they also afford a recruiting ground for filling up appointments in the subordinate agricultural service. In order to encourage the agricultural graduates to take to farming, the Punjab Government are contemplating the institution of a system of leasing farms to them on specially easy terms with Government assistance.

(b) *Agricultural Middle Schools*.—The Agricultural Middle Schools are intended to give special training to the sons of farmers. There are now six such schools in Bombay, where the first school of this type was opened in 1910. Agricultural Middle Schools are strictly speaking technical or craft schools providing a course in agriculture of a practical character and receiving pupils at about the age of thirteen after they have undergone a course of general education. In these schools education is imparted in vernacular. The actual object aimed at is to send the pupils back

* For a detailed account of the system of Rural Education prevalent in India see the Memorandum of Mr. J. A. Richey, Educational Commissioner with the Government of India, submitted to the Agricultural Commission; Evidence, Vol. I, pp. 114-118.

to their land so that they might utilise their training for cultivating it more efficiently, but it is feared that this object is generally not fulfilled. It is also complained that admission to these schools is not sought after by agriculturists with any noticeable eagerness. Bombay alone claims that these schools have proved a success. In the words of Mr. Richey, "There does not appear to be any future for the Agricultural Middle Schools until the standard of agriculture amongst the parents has been so raised by demonstration and the work of the Agricultural Department that the value of agricultural education is recognised." Agriculture, as at present conducted, has few attractions for an intelligent promising boy whose ambition, therefore, turns to other openings and who is reluctant to get stuck in the blind alley of the Agricultural Middle School.

(c) *Agriculture as a subject in the general curriculum* :— Practical instruction in agriculture is not attempted in the primary schools which are content with providing for simple nature study intended to promote a general bias in favour of life in the villages.

The Punjab, instead of starting Agricultural Middle Schools like the other provinces, has introduced the teaching of practical agriculture in the vernacular middle schools, so as not to debar the students taking agriculture from proceeding to a higher stage of education if they desire to do so. Farms are attached to schools where agriculture is taught and have generally met with considerable success and the whole scheme is likely to be adopted by other provinces as well.

In conclusion, we may say that the facilities for agricultural education require to be very greatly extended to meet the needs of a large country like India. In this connection, the experiments in agricultural education being tried in some of the newer states of Europe merit close study by Indians. At the end of 1921, the small Republic of Czecho-Slovakia possessed 200 agricultural, gardening, fruit-growing, and forestry schools in addition to two agricultural academies, 19 agricultural secondary schools and a large number of popular two-year schools, winter schools etc.* Besides this, the country has also a popu-

* We are indebted for this information to the late Professor G. S. Bhate of Patna College.

lar training system extending to the remotest villages. Agricultural education, moreover, is furthered by numerous agricultural papers, district and national exhibitions, by lectures, cinema films etc. Czecho-Slovakia is by no means a wealthy country but is straining every nerve to achieve her economic salvation. What is missing in this country is the restless enthusiasm and the preparedness to make experiments even at the risk of repeated disappointments without which rapid progress is impossible. Government in this country have done something for agricultural development but they can do much more. Nor has the educated community yet learnt to appreciate the vital importance of agriculture in India. Most of the Indian Universities have hitherto neglected the study of agricultural economics. This is possibly due, *inter alia*, to our political connection with England, which is predominantly an industrial country and our want of touch with the progressive agricultural countries in Europe like Holland, Denmark etc. This may be partially remedied if every university has a special department for translating foreign works on agriculture into English and the vernaculars.

§ 4. Royal Commission on Agriculture:—(i) Two recent events of outstanding importance for Indian agriculture may now be referred to. For the purpose of taking stock of the results achieved in agricultural revival in the past twenty-five years or so, and settling the lines of future advance, a Royal Commission on Agriculture was appointed in January 1926 with the Marquess of Linlithgow as the President. The terms of reference were:—
“Generally to examine and report on the present conditions of agriculture and rural economy in British India and to make recommendations for the improvement of agriculture and the promotion of the welfare and prosperity of the rural population; and in particular, to investigate (a) the measures now being taken for the promotion of agricultural and veterinary research, experiment, demonstration and education, for the compilation of agricultural statistics, for the introduction of new or better crops and for improvement in agricultural practice, dairy-farming and the breeding of stock; (b) the existing methods of transport and marketing of agricultural produce and stock; (c) the methods by which agricultural operations are financed and credit afforded

to agriculturists; (d) the main factors affecting rural prosperity and the welfare of the agricultural population and to make recommendations.

"It will not be within the scope of the Commission's duties to examine the existing system of land-ownership and tenancy or of the assessment of Land Revenue and irrigation charges, or the existing division of functions between the Government of India and the Local Governments. But the Commission shall be at liberty to suggest means whereby the activities of the Government of India may best be co-ordinated and to indicate directions in which the Government of India may usefully supplement the activities of Local Governments."

The exclusion of Land Revenue and tenancy was the subject of considerable adverse comment in non-official circles as these matters are vitally connected with any scheme of agricultural reconstruction. It may be, however, hoped that the inquiry of the Commission while it has lost in breadth has gained in depth. Moreover, the various Local Governments have been instituting investigations touching the matters that have been excluded from the scope of the Commission's duties. The Bombay Government, for example, recently appointed a Land Revenue Assessment Enquiry Committee and is contemplating action on its recommendations which will be noticed later on.

The Commission after hearing evidence both in India and England has just finished writing its report whose publication is awaited with considerable interest and eagerness.

(ii) *The Bombay Presidency Agricultural Show*:- Another important landmark in the history of Indian agriculture was the First Bombay Presidency Agricultural Show held at Poona in October 1926, which was the largest ever held in Asia. It attracted more than 185,000 people of whom about 60 per cent were cultivators. Among the visitors were included representatives of various Provinces and Indian States and the members of the Royal Commission on Agriculture. The most attractive and important sections of the show were the Land Improvement Court, the Water Court, the Machinery Section, the Cattle and Poultry Section, Rural Industries and Co-operation. It is intended to organise such shows

annually at the various centres in the Presidency and it is understood that some of the other Province* are contemplating the holding of similar Shows. The beginning thus made in regard to this most educative and useful institution must be developed on suitable lines. Western countries have realised the great value and utility of these shows and exhibitions and rightly consider the enormous expenditure on them as excellent investment. Besides holding big shows like that of Poona as frequently as possible, smaller shows for the Divisions, Districts and Talukas, must also be organised so as to give full recognition to variations in local conditions and needs, and to carry the lessons of the shows to every nook and corner of the country.

* See Indian Year Book, 1928.

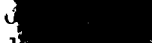
CHAPTER XII

AGRICULTURE : (Continued)

LAND TENURES.

§ 1. Historical survey of Land Revenue in India :—From very ancient times the state in India has claimed a share of the produce of the soil from the cultivators. The Laws of Manu mention one-sixth of the gross produce, i. e., of the grain heap on the threshing floor, as the legitimate share of the king, though the proportion might rise to one-fourth in times of war or emergencies. The plan of fixing a certain share of the produce offered many advantages in an early stage of society. Whatever the land produced was heaped on the threshing floor and in the presence of the king's officer the share of the state was abstracted from the heap. The demand of the state varied automatically with the outturn and no elaborate system of suspensions and remissions of the revenue was necessary. But the disadvantages of the plan are equally obvious. With the growth of population and extension of cultivation, the task of collecting land revenue in kind becomes increasingly difficult. Unless a large staff of officers is employed for supervising the division, the cultivators will conceal or make away with the grain and local collectors will batten at the expense of the cultivator and the state. The grain may lie rotting on the threshing floor as the officer of the king may not come for a long time to supervise the division. These disadvantages sooner or later compel the adoption of alternative methods of collection. For instance, an estimate of the standing crops may be made and the share of the state fixed accordingly, irrespective of the actual outturn realised at the harvest, which may or may not agree with the estimate. This and other similar devices gave place eventually to payment in money—a development that was hastened by the rapid expansion of some of the Muhammadan kingdoms which rendered collection in kind under the old system unworkable. *

* See Taxation Enquiry Committee's Report, Vol. I, p. 40.

The Institutes of Timur represented the first systematic attempt in the direction of commuting the State's share of the produce into money. The next attempt was made by Sher Shā (1540-1555); but his labours remained uncompleted owing to the shortness of his reign. The third and the most famous *Settlement* was made under Akbar by his able finance minister, Todar-Mal. A more scientific and detailed system of investigation into the taxable capacity of different soils was undertaken as a necessary preliminary to the fixation of the revenue demand. Land was carefully measured and divided into four classes representing different grades of fertility. The Government share was fixed at  of the gross produce. Option to pay in cash based on  average prices of food-grain during nineteen years preceding the settlement was given, and the term of the Settlement was fixed at nine years.

Thus the Moguls did not introduce any fundamental changes in the ancient revenue system of the Hindus, but merely reduced the customary and unwritten usages of the Hindu administration to a coherent system. They are, however, to be credited with the introduction of regular records and revenue accounts for the purpose of gaining some definite knowledge about the financial resources of the state. In the Deccan, similar developments took place notably under *Malik Amber* of Ahmednagar, who established certain revenue rates called the *Ain* ("the thing itself.") or essential rates, being one-third of the cash value of the gross produce.* The Marathas accepted these rates as the basis of their system, raising them to what they called the *Kamal*, i. e., maximum or perfect rates payable only by the best lands. In the majority of cases, the assessment was not permanent, but in the Deccan, the *Mirasi* †tenure had fixed assessment as one of its

* Mr. Keatinge contrasting Malik Amber's system with that of Akbar points out that, while the assessment which he aimed at was similar to that of Akbar his ideas of land tenure were different. His object was to attach the cultivator to the soil; and with this object he made much of the land the private property of the cultivators, attaching to the proprietary right the power of sale and granting other lands as the joint property of the village community. (Keatinge: *Rural Economy*, pp. 2-3)

† Under the Maharattas, there was also a well-defined tenure called *Upri*. The *Upri* was a tenant-at-will of the government liable to enhancement of assessment and at liberty to take as much land every year as he wished to cultivate. He paid an assessment according to the crop he obtained.

incidents. "Mirasdar held his land on permanent heritable tenure subject to the payment of a fixed assessment, which he was liable to pay whether the land was cultivated or not"[¶] In many cases the actual assessment was further enhanced by the levy of a number of cesses. This development was found to have taken place all over India, wherever the authority of the central government had declined. The proportion of the cesses to the standard assessment ranged between 33 and 50 per cent in some cases as in Bengal according to the calculation of Sir John Shore.[†]

The next most important feature in the Land Revenue and tenure is in connection with the *Revenue Pargana*. This was a great improvement and development of the local system of tenure in India, than one province. The institution was designed to ensure a steady income into the treasury of the Central Government, which in the declining days of the Empire became more and more incapable of controlling revenue officials in the outlying parts of the Empire. No precise date can be assigned to the advent of this system, but it became fairly general in Bengal from the reign of Emperor Farukhsiyar (1713 A. D.). Under this system the revenue farmer paid government nine-tenths of the whole collection and kept the rest as his remuneration. But later on a further stage of degeneration was reached, when the right of collecting land revenue for a Pargana or district was sold by public auction to the highest bidders, who were held responsible for payment of the amount thus fixed in one lump sum into the Government treasury retaining for themselves any surplus over it. In some cases, the Hindu chieftains or Rajas subdued by Mogul arms were made revenue farmers under Imperial warrant. Although at first the office of the revenue farmer was not hereditary and was subject to the supervision of the state officials, it tended to become hereditary as the control of the central authority relaxed. The revenue farmer gradually consolidated his position by taking full advantage of the political disorganisation and of the

[¶] Keatinge: *Rural Economy in the Bombay Deccan*, p. 3.

[†] See Taxation Committee's Report, P. 40

special opportunities for self-aggrandisement which it held out to him. He pretended to be proprietor of his charge by first of all cultivating the large waste area in addition to his own (Sir) land and later on by buying out small neighbouring cultivators by fair or foul means. It thus resulted that by the time of Lord Cornwallis the revenue farmers had evolved into a powerful body hardly distinguishable from full proprietors as Roberts puts it in his *Historical Geography of India*, "the Zamindari" which was originally a hereditary contract agency for the collection of revenue became something resembling a landed proprietorship. The general dislocation in administration during the last days of Moghul rule and the chronic financial weakness of the Government made the position of the revenue farmers stronger and more dangerous as they became the only source of ready money. The official organisation of land revenue administration having disappeared, the revenue farmers' operations were entirely unchecked and the Government was so demoralised that it had neither the power nor the will to mitigate the oppression and extortion of the villagers and the demands of the farmers of revenue.

Revenue farming, at first confined to the Moghul Empire and more particularly to the province of Bengal, soon extended to the other parts of the country for similar reasons and even the Mahrattas, whose revenue system under Nana Faranvis during the latter half of the 18th century, was universally recognised to be extraordinarily efficient and equitable, adopted it under the incompetent rule of the last Peshwa soon after the death of Nana Faranvis. It must be noted, however, that though the system thus came to be widespread, its effects were not uniform. In Northern India, where it was introduced earlier and where the central authority weakened faster, they were more complete and lasting as shown by the growth of the Zamindari rights in Bengal. In other cases, no permanent traces were left as, for example, in the Deccan, except in the outlying districts of the Konkan where the Khots at one time revenue farmers acquired landlord

* All Revenue Farmers irrespective of their origin were called Zamindars and sometimes Talukdars—terms which did not necessarily imply any definite proprietary right in the land.

rights. Midway between the two extremes, as in the great Provinces, the revenue farmers succeeded in creating onlye. This overlord rights. The same was more or less the case in the Central. The net result of revenue farming and of the gen and Bengal characterising the revenue administration was seemindari rights ing complexity of land tenures and rights and

ture from former revenue practice.

assessment, prevalent since *ant Village*:- The Landlord village so the task [redacted] British single individual landlord or a body of absence [redacted] about a group of ancestrally connected fami- revenue. [redacted] acted collectively as the landlord of the made in the beginning and or as established by their own found- ble system was evolved *the village is treated as a single unit*. The e landlord has pretensions to be of higher

§ 2 Three kinds of L- le to the other cultivating tenants, interest of the subject of arers may themselves cultivate the stand it properly, because w- he village is the *property of the village* ures, the systems of Reven, that it may be rented to tenants and vinces can scarcely become he members of the community or it way in which land is held de+ under cultivation without the persons responsible for the paym- *estate is assessed to one sum of* form of settlement, the various *graty of co-sharers are jointly and* in land, their recognition and cial exemption from joint of the unit of assessment adopted. | the individual share of land

The following are [redacted] a particular co-sharer with in India. (1) First [redacted] the common affairs of the re, where one [redacted] a few joint owners are made responsible in o- [redacted] revenue on the whole estate as in Bengal. (2) Secondly, [redacted] the smaller estates, essentially of the same character as the [redacted] with certain distinguishing features. They are village [redacted] which are held by co-sharing bodies or village communities the members of which are treated as jointly and severally liable for the land revenue. We have here to [redacted] with a collective or ideal landlord. (3) Lastly, land made [redacted] in single independent holdings owned severally

§ For [redacted] deal of the purely descriptive part of this chapter we are indebted to [redacted] *Aden-Powell's Land Systems in British India and Land Revenue in* [redacted].

aggregated locally in villages, the individual holders be-
ally responsible for the payment of the land revenue.
ee tenures are called (a) Zamindari, (b) Joint village
ri and (c) Rayatwari, respectively.

main forms of Village constitution:—We have

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very simple. Land is owned and

various owners, each of whom may

s holding or cleared it from the

ate of these separate cultivators,

Rayatwari village. The

s the Government though

it may be used by the village wood-cutting etc.

Land revenue is assessed holding and the

responsibility for its payment is individual. Apart

from subjection to common officials and the common

enjoyment of the services village artisans and

menials, there are no further points of contact among the

villagers. It follows from all this, that the importance of the

* For the interesting but controversial question of the origin and of the forms of village in India see Baden-Powell's *Land Systems in British India*, pp 88-90.

† See Ch. V, pp. 148-52.

‡ See Baden-Powell: *Land Systems of British India*, Ch. iv.

Headman or Patel and, in general, of the village officials is greater in the Rayatwari village than in the Landlord village. This form of village is universal in Madras, Bombay, Berar and Central India and was also prevalent in Central Provinces and Bengal before the superimposition of Malguzari and Zamindari rights respectively.

(ii) *The Landlord or Joint Village.*—The Landlord village so called, may be owned by a single individual landlord or a body of co-sharers who may represent a group of ancestrally connected families claiming to be regarded collectively as the landlord of the village as already existing or as established by their own foundation; but in either case the village is treated as a single unit. The individual or the collective landlord has pretensions to be of higher caste than and superior title to the other cultivating tenants, though sometimes the co-sharers may themselves cultivate the estate. The waste land of the village is the property of the village community as a whole, so that it may be rented to tenants and the rents divided among the members of the community or it may be partitioned or brought under cultivation without the leave of Government. The whole estate is assessed to one sum of land revenue for which the whole body of co-sharers are jointly and severally responsible, although special exemption from joint responsibility may be secured and the individual share of land revenue may be separated out by a particular co-sharer with the permission of Government. The common affairs of the village were originally managed by Panchayats or representative bodies consisting of the leading co-sharing families. Strictly speaking, there is no single village Headman, although an individual may be selected as the *Lambardar* to represent the village community in its dealings with Government, especially in connection with Land Revenue Settlement. This type of village is particularly strongly developed in the Punjab and is mostly connected with Muhammadan ideas as contradistinguished from the Rayatwari village which is associated with Hindu Government and Hindu ideas. It is also found among the Jat, Gujar and other tribes in the Central Punjab, as well as among the conquering Aryan tribes and descendants of chiefs and nobles in other parts.

§4. Constitution and types of joint or landlord villages:—Turning to further details of the internal constitution of such villages we may refer to three distinct varieties depending on the principle according to which the co-sharers allot the land or the profits and produce of the land:—(1) *Ancestral villages*:* First of all there is the ancestral or family share system under which each member of the co-sharing body takes the fraction of the whole which his place in the geneological tree points out. There are the following types of ancestral villages:—(a) Villages held by a joint body undivided as in the case of a joint undivided family, (b) those divided under the ancestral share system (*pattidari*) and (c) those partially divided on the ancestral system (imperfect *pattidari*). (2) *Non-ancestral villages*: Here there are special customary systems of sharing under the true *bhaiachara* † principles of (a) sharing in equal lots made up artificially of various strips of land, (b) sharing by ploughs in which land is assigned according to the number of ploughs owned or (c) with reference to shares in water, or (d) shares in wells. In all these cases, however, allotments are still regarded as shares of a jointly owned whole. (3) Thirdly, there is the system of *de facto* holdings where there is no specific rule of sharing and the existing holdings are recognised as such. (i) This may have been derived from the break-down of an original family system, for instance, in villages once *pattidari*, but where owing to the changes and chances of time and the effects of heavy revenue burdens the old share system was upset and the principle of *de facto* holdings was, therefore, accepted. or (ii) it may be a custom that always existed under which *de facto* holdings have been recognised from the very beginning.

In the ancestral villages, the revenue burden is proportioned to the fractional share in the estate, more or less nearly and in principle; while in the case of the non-ancestral forms, the revenue burden is proportioned to the actual holding according to the *bhaiachara* or *de facto* holding principle.

* Among the ancestral villages are also included single landlord villages where, however, the question of allotment of land or shares does not arise.

† The term *bhaiachara* is officially used in a more general sense and covers all variations of the non-ancestral landlord villages.

These three different rules of sharing must be regarded as being the outcome of one or other of the *three possible ways* in which all joint or landlord villages have been formed, viz., (i) they are either *bodies who have jointly succeeded to a village at first held by one common ancestor* who in his turn may have been either a founder or a grantee or a revenue farmer or again a ruling chief reduced to the position of a landlord as in the United Provinces, or (ii) they are bodies made up of a certain number of families belonging to an *immigrating or conquering clan which allotted the area according to its customary methods*, or lastly, (iii) they are merely *co-operative colonising groups* formed under circumstances which led them to establish cultivation on the joint-stock principle.

It may be noted here that over the village landlord bodies a *superior overlordship* may occasionally arise as in the case of the Oudh and Agra Talukdars, who are overlords over a number of village communities. The latter, however, retain the same essential principles as in the case of independent village communities. The origin of these overlord rights is similar to that of the independent landlord villages themselves.

§ 5. Landlord estates including more than one village estate:—Some landlord estates extend over a larger area, perhaps a whole district or Pargana, although the component villages even here do not lose all their importance. The origin of these bigger landlord estates does not present any special features and is accounted for as in the case of village estates. The present landholder may be a descendant of a former territorial chief or ruler, or of a revenue farmer or other land official, or of a grantee of the state, Jagirdar or Inamdar. The bigger size of the estate in this case is merely due to the fact that the lordship started from a source of higher rank or was more directly connected with the ruling power. Such landlord estates exist on a large scale in Bengal owned by Zamindars and in Oudh and Agra to some extent where we have the Talukdar class. They are quite exceptional in the Punjab. In the Central Provinces, the estates of the special class of landlords called Malguzars occupy a very large proportion of the total area of the Province, but they are not landlords in the Bengal sense.

In Bombay, there is a variety of landlord estates. Apart from the class of Jagirdars and Inamdars, there are the Gujarat Talukdars and Khots on the west coast of the Deccan coming under this category. In Madras, especially in the Northern part, there are several great Zamindars of the Bengal type.

This survey of the (proprietary) land tenures in India brings out the enormous complexity and great variety of forms that have been developed as the result of several historical factors, such as wars and invasions, tribal and local conquests, rise and fall of ruling families and so on. To the right by first clearing, which must have been originally of primary importance, has been superadded the right by conquest, grant or natural superiority etc.

§ 6 Sub-proprietary and Tenant rights:—In this process of superimposition of rights one upon another as the result of conquest, grant, or revenue farming, *as new overlord rights may be created so also original proprietary rights may degenerate into sub-proprietary or tenant rights.* In some cases, the *ex-proprietors* were able to maintain a privileged position even under an overlord and the recognition of the person at the head as the proprietor made the recognition of others below also necessary. The confusion that characterised landed rights, especially the large number of grades of landed rights, *made the recognition of these rights very difficult.*

In the Rayatwari tracts, the question was very simple in the absence of any considerable overgrowth of rights. In most cases the cultivator was also the landlord. Where tenants were employed there was no doubt that they were *ordinary contract tenants* created by the owner and, therefore, not requiring any legal recognition. In a few cases at the most, there might be a loose overlord right which could be sufficiently provided for by the payment of a fixed rent charge by the actual proprietor. But *in the Zamindari tracts and the joint village estates, the position was much more complex, a number of intermediate grades having come into existence.* Baden-Powell gives the following table to illustrate the various interests that may intervene between the Government with its revenue rights and its occasional direct ownership of land, and as the fountain head of rights at the top,

and the actual cultivator, wherever he has any permanent right to occupation, at the bottom.*

One Interest	Two Interests.	Three Interests.	Four Interests	
1. the Government the sole proprietor.	1. Government. 2. The <i>raiyat</i> , or 'occupant' with a defined title (not a tenant.) (As in Madras, Bombay, Berar etc.)	1. Government. 2. A landlord (<i>Zamindar</i> , <i>Talukdar</i> or a joint village body regarded as a whole.) 3. The actual cultivating holders, individual co-sharers etc.	1. Government. 2. Landlord. 3. sub-proprietors, or tenure-holders. 4. The <i>raiyat</i> or actual cultivator.	1. Government. 2. An overlord or superior landlord. 3. An actual proprietor or landlord (usually a village body) 4. The actual cultivating holders, individual co-sharers, etc.

(i) *Sub-proprietary rights*.—The main characteristic of the sub-proprietary tenure is that the holder is the owner in full as regards his particular holding but has no part in the whole estate or its profits and no voice in its management. The illustrations of this category are found in *Bengal*, where certain persons known as the *tenure-holders*, have been granted a privileged status of permanent, heritable and transferable tenure held at fixed payment, because they were able to maintain such a position in spite of the general predominance of the *Zamindar* class. The difficulty of defining their status led subsequently to the adoption of the rule, made under the Act of 1885, that all those persons below the *Zamindar* owning 100 Bighas of land were entitled to the status of a tenure-holder.

Another modern instance of such rights is provided by the class of *Patnidars* who were given a permanent managing lease for a part of the estate by the *Zamindars* who found their estate

* See *L. R. in British India*, p. 129.

too unwieldy and were desirous of sharing their revenue responsibility with others. The Patnidars in their turn often created tenants called *Dippatnidars* endowed with similar privileges and charged with parallel revenue responsibilities. Such rights were recognised by the Bengal Regulation of 1819.

Another class of sub-proprietors is found in those cases where the present proprietary landlord body has grown over an earlier group; *certain families would be able to maintain their position paying only Government assessment and no rent to the superior landlord in respect of their holdings.* A third class is found in the *Central Provinces*. The artificial creation of the Malguzars, under the influence of the earlier policy followed in Upper India, of fixing revenue responsibility on one landlord for each village, which was originally Rayatwari in character, necessitated the recognition of sub-proprietary rights. Lastly, in *Oudh*, occasionally *entire village bodies were able to preserve their rights of independent management* subject to the payment of a fixed rent to the overlord Talukdar. Their sub-proprietary rights have been recognised by a *separate sub-settlement* with them fixing their rent payment to the Talukdar with whom the main settlement is effected by Government.

(ii) **Tenant rights*:—We may now proceed to deal with tenant rights, not of the ordinary contract tenants, but of those holding some privileged position. First we shall mainly concentrate on a description of the features common to all the provinces without entering into minute details relating to every particular province. The same general features that account for the rise of the landlord and overlord rights explain the existence of tenant rights of different grades. Those who are now classed as tenants in the case of landlord estates, joint or individual, must at one time have enjoyed a superior status. The more complete the landlord or the overlord rights and the greater the opportunities and time at the disposal of persons acquiring these rights, the more will the lower grades sink in point of their status. Thus different grades of tenant rights

* See Baden-Powell: *L. R. in British India*, section V, Chap. VII, and Taxation Enquiry Committee's Report, Vol. I, pp 45-46.

would arise depending on the strength of the pressure exerted from above. There were two difficulties regarding the recognition and definition of these tenant rights by the British administration; one was that not in all cases was direct proof available of a former superior status enjoyed by the tenants; and the second difficulty was that, besides persons entitled to recognition on the ground of a former proprietary status, were also other tenants who were in a sense a privileged class, because they were brought in by the landlords on a contract basis, but at a time when tenants were too valuable to be ejected. The result was that a distinction between natural and artificial tenants had to be adopted. The natural tenants were those in whose favour definite facts could be asserted and proved; the artificial tenants were those who were not able to adduce any definite proof of the circumstances and origin of their tenant rights. To meet the case of the artificial tenants the *twelve-year rule* was adopted in Bengal, Agra and, to a limited extent, in the Central Provinces. In Bengal and Agra, the Tenancy Act of 1859 provided for the recognition of a tenant as *occupancy tenant*, if he had cultivated the same land continuously for twelve years. The Act was, however, evaded by the landlords who made it impossible for any tenant to hold the same piece of land continuously for the required period and it was, therefore, amended in Bengal in 1885. Cultivation was now required, not necessarily of the same piece of land, but of some land in the same village continuously for twelve years. In Agra, the Act was not formally amended in this way, but a number of restrictions were imposed by an Act passed in 1901, so as to prevent the landlord from defeating the provisions of the law. In Oudh, occupancy rights, at first limited under the Act of 1886, to tenants who having at one time enjoyed proprietary rights had lost them, were extended subsequently to ex-proprietors whose proprietary rights were transferred by sale or execution. In the Punjab, the right of occupancy can be acquired only by tenants whose claims are based on certain historical grounds and not by mere lapse of time. The Punjab Act of 1887 defines occupancy tenants as those who, for two generations, have paid neither rent nor services to the proprietor but only their share of Government assessment. In the Central

Provinces also, the twelve-year rule was applied at first, but later on it was given up in favour of an arrangement, which allows purchase of occupancy right at two and a half times the annual rental. This in its turn was superseded by another rule framed in 1920 which recognised two classes of occupancy tenants, both having transferable rights subject to certain conditions. In the Zamindari estates in Madras every rayat, who possessed *rayati* land (i. e., land which is not the home farm or the *Sir* land of the proprietor) at the time of the passing of the Estates Land Act of 1908, modelled on the Bengal Act of 1885, and every rayat, admitted by the landlord to the possession of land, has a permanent right of occupancy. His position has thus been assimilated to that of the occupant in Rayatwari areas. In Bombay, the special Act of 1880 dealing with the Khots protected the old residential tenants in the same manner as occupancy tenants elsewhere. There are also other cases of special tenure, such as the Talukdari tenure, which are dealt with under the special Act of 1862.

* § 1. Other than occupancy tenants:—We have devoted so much attention mainly to occupancy tenants for the reason that they constitute by far the most important class of privileged tenants in landlord areas. It is necessary, however, to add that there are several other classes of tenants occupying a status in some cases higher and in others lower than that of occupancy tenants. By way of illustration, we may refer to the superior class of tenants in Bengal known as tenure holders and already mentioned above, and Rayats at fixed rates who can neither be ejected nor made liable to enhancement of rent. Similarly, in the United Provinces, in the permanently settled districts of Benares, there are certain tenants at fixed rates. Again, in the Central Provinces we have the class of 'Absolute Occupancy Tenants' recognised at the first settlement as having an exceptionally strong position. These cannot be ejected practically for any reason whatever. They pay a privileged rent which, moreover, is fixed by the Settlement Officer for the whole term of the settlement. On the other hand, there are certain inferior tenants comparable to the tenants-at-will in Rayatwari areas but enjoying a certain amount of protection not available to the latter.

§ 8. General ~~principles~~ of occupancy privilege:—We may now briefly indicate the nature of the protection enjoyed by occupancy tenants. In the first place, there is a *limit to the enhancement of the rent* both as regards the amount and the period which must elapse before rent can be increased. Enhancement can occur only as a result of agreements or by decree of a Court on specific grounds. In Bengal, the law lays down that these agreements must be in writing and that the enhancement cannot take place oftener than once in fifteen years and cannot be more than two annas in the rupee. The grounds for enhancement recognised by the Court in the event of a suit are lightness of rent as compared with neighbouring land, advance of prices or improvement in the productivity of land due to the enterprise of the proprietor or to ~~fluxial~~ *fluxial* action. The tenant can sue for a reduction of rent on the ground of permanent deterioration of the soil or a permanent fall in local prices. In the Central Provinces, the rent is fixed by the Settlement Officer as in the case of 'Absolute Occupancy Tenants, but not for the whole term of settlement, being liable to revision every ten years. In Madras, rent cannot be increased by more than 12½ per cent at one time.

In the second place, there are certain *provisions protecting the occupancy tenant from ejectment* except under special circumstances. Provisions in this behalf are really complementary to those in connection with enhancement of rent. Either set of provisions would be useless unless supplemented by the other.

Thirdly, the occupancy right is *hereditary and can be alienated*, i. e., parted with or transferred outside the family on certain conditions.

Fourthly, there are certain *tax and land revenue* ~~tax and land revenue~~ *strands* for rent securing the exemption of cattle, tools, seed, and so on. Further, in every case proper notice to quit ~~and~~ and payment of rent is by instalments. Fifthly, ~~reductions~~ *reductions and suspensions* of land revenue granted by Government to the landlords in a bad year must be followed by corresponding concessions granted to the tenants by the landlords.

Lastly, the *right to make improvement* ~~the~~ *the land without enhancement of rent is also protected within certain limits, or in the event of higher rent being charged, compensation must be allowed.*

In short, the aim of these rules is to confer on the tenants the privilege of the three F's, fair rent, fixity of tenure and free transfer as in the case of the Irish land legislation.

§ 9. **Tenancy in Rayatwari Provinces:**—Here, as a general rule, there has been little artificial growth of a landlord or middleman class between the landholder and the State. There is, therefore, not the same necessity of recognising subordinate rights and varieties of tenancy which need such careful treatment in North Indian Settlements. As we have already seen, there are some landlord estates even in Rayatwari provinces, as in the case of the Madras Zamindar or the Bombay Khots and Talukdars, and most of these cases, as we have just noted, have been provided for by special Tenancy Acts. As regards the ordinary contractual tenants under Rayatwari holders either in Madras or Bombay or any other province, where the Rayatwari system is mainly in force, there is no special legislation intended to protect them from arbitrary rent enhancement or summary *eviction*, although, of course, the general Tenancy Law will enforce the terms of an agreement, if any, between the two parties, or failing an agreement, the dictates of any particular usages of the locality in question. The increase in the number of tenancies and the rise in the rents due to excessive competition among tenants for land is gradually creating a situation in Rayatwari areas which needs to be met by Tenancy Legislation on lines similar to those adopted in Zamindari provinces.

§ 10. ~~Land~~ Revenue Settlements.

What is a Settlement? The ground being prepared by a preliminary study of ~~land~~ ~~revenue~~, we are now in a position to consider Land Revenue ~~Settlements~~. What is technically called a Settlement of Land Revenue, consists in the determination of (1) the share of the produce ~~or~~ the rental to which the State is entitled; (2) the person or persons liable to pay it; and (3) the

record of all the private rights and interests in the land. As previously stated, the last item is particularly important in landlord areas, individual or joint, where there is a regular gradation of landed rights and interests that have to be recognised.

Requisites of a Settlement:¶—Three principal stages in the process of Land Revenue Settlement may be distinguished:—(i) Preparation of a Cadastral Record; (ii) assessment of revenue and (iii) collection of the revenue assessed.

(i) *The Cadastral Record:*—The *Cadastral Record which includes the village map, the fiscal or the revenue record and the Record of Rights is prepared by means of a detailed field to field survey of the land and the demarcation of the boundary lines so as to secure an exact account of the culturable land, the extent of each kind of soil requiring a different rate of assessment and the preparation of a correct Record of Rights. From this survey, a map is prepared for each village showing the separate holdings and the area and nature of the culturable and waste land. To correspond with the village map, a field register is usually prepared and from these two, the Fiscal or Revenue Record, showing a correct list of revenue payers with the amounts shown, and their names. These are supplemented by statistical returns illustrating the past history and the present condition of the village. Lastly, a Record of Rights, either separate or as an adjunct to the Revenue Record, is prepared showing the tenure of land, and the various rights in the land, such as the rights of landlords, co-sharers, sub-proprietors, occupancy tenants etc as well as the rights created by mortgage, sale, lease and so on. All these records are kept up-to-date by a system of public entry and registration of all changes. The rights thus recorded are presumed to be legally valid until the contrary is proved.

(ii) *Assessment of revenue:*—For the ascertainment of the revenue demand there is a valuation of the land, the ascertainment of revenue rates, the totaling up and adjusting of them to give the sum payable by the estate or holding. In some cases, sub-

¶See Imperial Gazetteer, Vol. ... on Land Revenue.

* Cadastral literally means showing extent, value, and ownership of land for taxation.

sidary proceedings to determine the distribution of this total among co-sharers and the adjustment of tenant rents are necessary.† The different bases for assessing revenue adopted in the various provinces will be considered presently.

(iii) *Collection of revenue*:—This may be discussed under the following three headings, (a) payment of Land Revenue in instalments, (b) procedure for the recovery of arrears and (c) suspension and remission of Land Revenue.

(a) *Instalments*:—Land Revenue is collected not in one sum but in instalments so as to suit the convenience of the revenue payers. In the case of a landlord, for example, he cannot pay unless the harvest is reaped and the produce marketed. Another consideration governing the system of instalments is to avoid too great a demand for cash at one time, which is likely to send prices down and raise rates of interest to inconvenient levels.

(b) *Procedure for the recovery of revenue arrears*:—In respect of recovery of arrears, there is a difference between tracts under Permanent Settlement and those under Temporary Settlement. In the former, the gift of the landlord right was accompanied on the condition that the revenue must be paid with promptness and punctuality under threat of immediate sale of the estate. A course of action deemed to be preferable to the necessity of subjecting a great landlord to the indignity of personal imprisonment or attachment and distraint of moveable property. In the Temporary Settlement areas, the procedure is less strict and the sale of land, instead of being the first step, is usually the last of a series of steps.

(c) *Suspension and remission of revenue*:—Though the assessment is fixed with reference to average seasons and conditions during the period of the settlement, exceptional disasters, widespread or local, such as total failure of rains or of other sources of irrigation, floods, blight etc. are apt to upset all calculations, even assuming that the agriculturist has the will and the power of utilising a good harvest. Insurance against a bad year, which is rarely the case, under these circumstances, relief

† See Baden-Powell: *L. & P. British India*, p. 148.

graduated according to the degree of crop failure is necessary and may take the form of suspension or remission, partial or complete. The suspended revenue may be recovered or remitted according to the nature of the succeeding harvest. Remission, partial or complete, is granted in the case of continued failure of crops over more than one year. It may be noted that no such relief either by way of suspension or remission is granted in the permanently settled Zamindari tracts, where, moreover, it is hardly needed in view of the present lightness of the fixed burden of assessment.

§ 11. Classification of Settlements:—(A) *Settlements fall into two classes according to their duration.* Where the share of the state is fixed in perpetuity as in Bengal, it is called a Permanent Settlement; and where it is fixed temporarily for a certain period, it is called a Temporary Settlement. The period is thirty years in Bombay, Madras and United Provinces and twenty years in the Central Provinces and the Punjab.

(B) *Settlements may also be classified according to the system of tenure.* Corresponding to the three main kinds of tenure already indicated, and as influenced by them, there are three main kinds of Settlement as follows* :—

(I) *Settlements for single estates under one landlord:*
Varieties :—

(1) Permanent Settlement with the Zamindars in Bengal, North Madras and Benares.

(2) †Temporary Settlement with the remaining Zamindars in Bengal.

(3) Temporary Settlement with the Talukdars of Oudh.

* See Baden-Powell. *L. R. in British India*, pp. 118-49.

† There is a confusion in the minds of many that the Zamindari Settlement is necessarily also a permanent settlement and that the Rayatwari Settlement is necessarily a temporary settlement. In point of fact, however, some Zamindari Settlements are temporary, for example, in Oudh and some Settlements in Bengal itself. Again, there is nothing to prevent a Rayatwari Settlement from being permanent, though, as it happens, there is no actual instance of this.

(II) *Settlements for estates of proprietary bodies, usually village communities.* These are called Mahalwari Settlements. Varieties (all varieties of this are on a temporary basis):—

(1) The Mahalwari Settlement in the United Provinces of Agra and Oudh (where there are no Taluqdars but only village communities).

(2) The Mahalwari Settlement of the Punjab.

(3) The Malguzari Settlement of the Central Provinces.

(III) *Settlements for individual occupancies or holdings.* Varieties (all varieties are on a temporary basis):—

(1) The Rayatwari system of Madras.

(2) The Rayatwari system of Bombay and Berar.

(3) Special systems (in principle Rayatwari but not officially so called) of Burma, Assam and Coorg.

Every Settlement must thus belong to one of the classes I, II, or III mentioned above and must be either temporary or permanent.

§ 12 (I) Zamindari Settlements:—(1) Permanent Settlement in Bengal:—We have already seen how the development of revenue farming, particularly in Bengal, led to the supersession of the old Rayats by a new body of landlords known as Zamindars. We have also pointed out how, owing to the disruption of the Mogul Empire, the old regular system of revenue administration evolved by Akbar had fallen into hopeless decay and the cultivators were ground down by the exactions of the Zamindar on the one hand, and on the other, by the numberless extra imposts levied on the land by the provincial rulers. The position, if anything, was much worsened in the early years of the company's rule after the grant of the Diwani in 1765. The confusion was worse confounded by Clive's Dual Government system, under which neither the Nabob's revenue officers nor the East India Company's Civil servants felt any responsibility for the good government of the country, with the result that the people were oppressed by both and protected by neither. The Supervisors of Revenue appointed in 1769 to protect the cultivator from the exactions of the Zamin-

dars, being young and inexperienced officers, did not in the least set matters right. The terrible famine of 1770 served only to intensify the difficulties. ^{sum the Warren Hastings} The Court of Directors decided in 1772 to stand forth as the Diwan and instructed Warren Hastings to assume the direct administration of revenue. He improved, to some small extent, the machinery of collection by appointing Collectors and subsequently by creating Divisional, Provincial and Central Boards of Revenue. The change in the method of assessment, however, proved disastrous. At first quinquennial and then annual leases for the collection of revenue were sold by public auction to the highest bidders setting aside the existing Zamindars and encouraging the introduction of capitalists and speculators, who tried to screw out the utmost by way of rents and additional illegal cesses on land. The deplorable state of the finances of the East India Company and its desire to give high dividends to its share-holders was, as Mr. Dutt says, at the root of the new system. It was chiefly to straighten out these matters and to relieve the agricultural distress in Bengal that Lord Cornwallis came out in 1786 to India.

The most important measure of the administration of Lord Cornwallis is the Permanent Settlement of Bengal. The idea of fixing the state demand in perpetuity first mooted by Francis and later on adopted by Fox in his India Bill, was ultimately recommended to the Indian authorities by the Court of Directors in 1785 and it was left to Lord Cornwallis, assisted by Sir John Shore, to carry out the policy of Permanent Settlement in Bengal. After enquiries lasting for three years, a settlement was made with the Zamindars who were declared full proprietors of the areas over which their revenue collection extended, so that they might have some legal status which would enable them to fulfil their obligation to the Government and induce them to take an interest in their estates. This right was however, subject to the payment of land revenue and to liability to have the estate sold for failure of payment. The Government also reserved the right to introduce any measures they might think necessary "for the protection and welfare of the dependent Talukdars, Rayats and other cultivators of the soil." The assessment was fixed approximately at ten-elevenths of what the Zamindars

received as rent from the Rayats, the remaining one-eleventh being left as the return for their trouble and responsibility. The revenue liability was fixed in a rough and ready fashion without any survey or record of landed rights and interests or any investigation into the productive capacity of the different classes of soils. In 1793, in consultation with the Court of Directors, the Settlement was declared permanent and the assessment unalterable for ever, and the Government specifically undertook not to make any demand upon the Zamindars or their heirs or successors "for augmentation of the public assessment in consequence of the improvement of their respective estates."* It may be noted here that while Sir John Shore was at one with Lord Cornwallis so far as the recognition of the Zamindars was concerned, he would have preferred to wait for the decennial period of settlement already in force to run out before declaring the Settlement perpetual.

§ 13. Criticism of the Zamindari Settlement of 1793 in Bengal—The Settlement thus effected is open to criticism on various accounts. In the first place, ^{From} ~~The essential preliminaries to any settlement, viz., a detailed survey, classification of soil and the preparation of a record of rights were dispensed with.~~ There were no doubt several more or less valid reasons for this omission. A really scientific survey was, under the then existing circumstances, difficult owing to deficiency of trained personnel etc. Secondly, it was thought impolitic to pry into the internal concerns of the estates and possibly to excite the distrust of the landlords. As for the rayats, it was hoped that the landlords would come to an understanding with them and protect their rights. Nevertheless, as Baden Powell remarks, the "fact that the Permanent Settlement was made without any survey, and without any record of landed rights and interests has proved more fraught with evil consequences than perhaps any other feature of the settlement."[†]

This leads us to notice the second ^{great} defect of the Permanent Settlement, viz., ~~the failure to guard the rights and the inte-~~

* See Taxation Enquiry Committee's Report, pp. 41-42.

† See *Land Systems in British India*, Vol. I, p. 289.

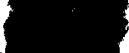
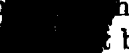
they
 rests of the rayats who suffered a double injustice' first, by ~~losing~~ ^{losing} their proprietary rights definitely and secondly, by being left almost entirely to the mercy of the Zamindars who proceeded to rack-rent them. There was, indeed, a general provision that leases or *pattas* were to be given to the rayats specifying the area as well as the terms and conditions of the holding, but, in practice, this was of no avail as the *pattas* could not be enforced and also in some cases because the rayats were unwilling to take them for fear of admitting their inferior position and of committing themselves to the acceptance of conditions which they did not understand. It must, however, be admitted that *the sad plight of the rayats was in no small measure due to the extremely heavy assessment which was exacted with great rigour.* In the event of default the estate was straightaway sold by auction. Under these circumstances, it was necessary to assist the landlord in realising the rents due from tenants to enable him to pay his Government dues with the absolute punctuality that was insisted upon. Again, in many cases, the landlord being unable to meet the state demand, his estate was actually sold and naturally the successor required a clear title before he could be induced to purchase it. This meant a more complete supersession of the rights of the rayat and his subjection to more and more extortionate demands on the part of the newcomer. The tenant had to wait for nearly three-quarters of a century before any attempt was made through the 'Tenancy Laws of 1859 and 1885 to grant him any redress from the grievous wrong he had suffered so long.

It has been asked whether it was absolutely necessary to give such unconditional recognition as proprietors to the Zamindars. In pursuing this policy Cornwallis is supposed to have been

* "The errors (coupled with the permanent Settlement) were twofold: they consisted, firstly, in the substitution of what may be denominated the yeomanry, by merging all village rights, whether of property or occupancy, in the all-dominating recognition of the Zamindars' permanent property in the soil; and secondly, in the subordination of the peasantry by one sweeping enactment, which left the Zamindar to his settlement with them on such terms as he might choose to impose." Sir J. E. Colebrooke, quoted by Morison: *The Industrial Organisation of the Indian Province*, p. 21

influenced by two considerations. In the first place, it is alleged that, coming as he did from the class of English landlords, he laboured under *aristocratic prejudices* and desired to create a landed aristocracy here similar to that in England, though the conditions of the two countries were widely different. But as Kay points out, *the Permanent Settlement was emphatically the work of the company's middle-class civil servants*. Quite possibly, the fact that he belonged to the English aristocracy made him readier than he otherwise would have been to accept a policy for which he was not exclusively responsible. But it is certainly not true that he was its sole originator and protagonist. The other consideration was that when he appeared on the scene, he found *the Zamindars occupying such a strongly entrenched position that it would have been impossible to ignore them* and set aside the development of a century and go to the root of the problem, as it were, trying to search out the owners of the soil, as opposed to the Zamindars who started by being **merely** farmers of revenue. In accepting the *fait accompli*, therefore, Lord Cornwallis, it may be urged, was impelled by the inexorable logic of facts. Further, it must be remembered that the *all-round ruin in which the agriculture of Bengal was then involved partly as the result of the kaleidoscopic changes in the post-Diwani revenue policy and the terrible famine of 1770, imperatively called for some drastic solution*. Under these circumstances, it was felt desirable to acknowledge as proprietors the Zamindars who happened to be the only well-established revenue machinery and in the recognition of whom seemed to lie the only chance of agricultural revival.

The third and the most important aspect of the Bengal Settlement, viz., *perpetuity of assessment* is a question not limited to Bengal alone but of much wider importance. It may, therefore, be reserved for treatment at a later stage. perh

Permanent Settlement in Benares :—In Benares, the British, anxious to follow the Bengal model, and as yet not sufficiently familiar with the peculiar system of joint  land, ignored the existence of landlord villages with a  plan or tribal connection, and dealt with one of the  sharers or some other prominent person on a permanent  basis (1795).

§ 14. **Permanent Settlement of Madras:**—In Madras, no definite plan was followed until after the cession of Mysore and the Karnatak districts, when, although a Settlement on Rayatwari lines had already been initiated, an attempt was made to extend the Permanent Zamindari Settlement to the whole Presidency. There was a considerable diversity of opinion as to the system to be adopted, but the Court of Directors, impressed by the punctuality with which revenue was paid under Permanent Settlement, instructed the Madras Government to enter into a permanent engagement with the Zamindars. In North Madras and certain parts of South Madras, individual landlords existed being mostly descendants of former ruling chiefs and no difficulty was experienced in settling with them. In South Madras, however, only a few of these landlords—or *Polygars* as they were called—were recognised and the others were dispossessed as a penalty for having resisted the British power. In the major portion of the Presidency, however, there were Rayatwari villages where no such intermediaries existed and in pursuance of the instructions of the Court of Directors, an attempt was made to create substitutes out of enterprising contractors. The villages were grouped together into artificial districts or parcels and sold by auction to the highest bidders, who then became the landlords of the whole estate. This experiment failed disastrously as it deserved to do. As Baden-Powell remarks, "The real Zamindar, in his natural, growth of a century and a half, was bad enough but what could be said for an auction-room landlord? Of course, the system failed miserably." The experiment was, therefore, abandoned in favour of the Rayatwari system strongly advocated and developed by Munroe, if not originated by him. But before the Rayatwari system was authoritatively adopted, between one-fifth to one-third of the Presidency had already come under the Permanent Settlement. The course of Tenancy Legislation for Zamindari estates in Madras has already been described

§ 15 **Subsequent history of Permanent Settlement:**—(a) *Under the Company:*—In the days of the Company's rule, Wellesley,

* Land Systems in British India, Vol. I, p. 292.

Minto, Hastings, Bentinck and Munroe† had all strongly advocated the extension of Permanent Settlement to other parts of India on the ground that, judging from the case of Bengal which had experienced a great revival under it, it seemed to hold out sure prospects of rapid agricultural development. The Directors of the East India Company, however, rejected the proposals (1820), although supported by three successive Governors-General and in spite of solemn pledges given by proclamation and the expectations raised in all parts of the country. As Mr. Justice Ranade pointed out, "Captain Wingate and his associates who were the great pioneers of the Bombay survey always regarded permanent settlement as the consummation of their land policy to which the periodical settlements were only intended to serve as a preparation and mid-way introduction"

(b) *Under the Crown*:—After the abolition of the Company the question was revived by Lord Canning on the recommendation of Col. Baird Smith, who was deputed in connection with the severe famine of Orissa in 1860 to enquire into the causes of and suggest remedies for such calamities. Sir Charles Wood while agreeing with the recommendation, failed to take any action. Sir Stafford Northcote, the next Secretary of State, proposed in 1867, the introduction of Permanent Settlement subject to certain conditions such as that, where 80 per cent of the cultivable land was brought under cultivation and there was no prospect of canal irrigation increasing the produce by more than 20 per cent, the state demand should be fixed in perpetuity. These conditions meant in effect that permanent settlement was to be deferred as long as the land continued to improve in value. Lord Kimberley, the Secretary of State, however, rejected the pro-

† It has, however, been disputed whether Munroe was really in favour of Permanent Settlement. It has been urged that what he really meant by fixed or 'permanent assessment' was securing the proprietorship of the ryots in their holdings in perpetuity and not unalterable assessment which he contemplated being raised or lowered according to the exigencies of the State. See Land Revenue Policy of the Indian Government, (Madras), p. 167.

* See the Bombay Land Revenue Assessment Committee's Report (1926), p. 72.

posal altogether finally in 1883 mainly on the ground that the country was as yet undeveloped. Since then the attitude of Government has been to regard the question of Permanent Settlement as closed, although from time to time the echoes of the old controversy of Permanent vs. Temporary Settlement continue to be heard.

§ 16. (2) Temporary Settlement with the remaining Zamindars in Bengal and (3) Talukdars of Oudh:--(2) Those parts in Bengal that are not permanently settled with for one reason or another came under a temporary settlement under which the percentage of the assets taken is very high, as much in fact as 70 per cent, the holders of the Settlement being usually middlemen of a class for whom 30 per cent of the assets is regarded as ample remuneration. With regard to the mode of assessment the system adopted in Bengal is identical with that in use in Agra which is described below.

(3) *Temporary Settlement with the Talukdars of Oudh*;—The component villages under the Talukdars are so important and so much considered that virtually the Oudh Settlement may be regarded as a modified form of the Joint Village Settlement system which we now proceed to describe

§ 17. (II) Mahalwari settlements:—The Temporary Settlement as developed in the Agra Province is the typical form adopted in provinces, where mostly village communities with landlord rights are dealt with. An attempt was at first made to settle the villages on a permanent basis with a revenue farmer or some other person of note. The Home Authorities, however, would not hear of a Permanent Settlement and besides in 1819, *Holt Mackenzie* as Secretary to a Commission of Enquiry, drew attention to the existence of village proprietary bodies and pointed out that they had to be reckoned with, that the single-landlord ideas derived from Bengal could not very well be applied, that a proper survey and a careful record of all rights whatever were indispensable and that Permanent Settlement as a general measure could not be thought of.

The question of Settlement in Orissa also came up at the same time that inquiries had been set on foot in the North-Western Provinces, now called the *United Provinces of Agra and Oudh*, and to deal with both the cases the famous *Regulation 7 of 1822* was passed. This together with later amendments is the chief basis for all subsequent Temporary Settlements with landlords and village bodies.

In Agra, barring a few cases of individual Zamindars and Agra Talukdars, in the majority of cases there was no person above the village bodies, who were, therefore, settled with directly in their collective capacity, though a co-sharer of standing and respectability was generally selected to undertake the primary liability in connection with the payment of the Land Revenue, and he signed the Settlement on behalf of the whole body which was made jointly and severally responsible for the assessment. The overlord rights of the Agra Talukdars being very much inferior to those of the proprietary rights of the Oudh Talukdars, their claims were disposed of by making the assessment payable by village bodies under them just so much higher as was necessary and ten per cent of the Land Revenue was paid as *Talukdari allowance* to them directly from the Government Treasury. Returning to the settlement with the village communities in Agra, we must note that a section of a village or even an individual co-sharer (above a certain limit) can move for what is called "*a perfect partition*" of separate and individual revenue liability to take the place of joint liability. The work of settlement is partly judicial and partly fiscal, referring respectively to the ascertainment and record of rights in land on the one hand, and on the other, the assessment of the revenue demand as well as in some cases the adjustment of tenant rents. As to the settlement, we have the usual stages of demarcation, survey, record of holdings and rights and lastly the assessment itself. We shall now discuss the last and the most important of these stages.

§ 18. Principles of assessment in Mahalwari systems:—The principles of assessment which we are about to describe must be understood to apply to all the Mahalwari systems. After experi-

menting with several methods, such as the valuation of net produce etc. Government adopted the following plan of fixing the assessment. The actual rental value of the lands in the village is taken as the basis, direct or indirect, of the assessment. Revenue is technically said to consist of "a fraction of the assets" of the estate as annually received. This fraction has varied from time to time. It was very high in the beginning under the East India Company being over 80 per cent;* it was reduced to 66 per cent in 1833 by Lord William Bentinck; under the Saharwal Rules of 1855 it was further reduced to about 50 per cent, and according to official claims the actual fraction of revenue due in the present cases is well below 50 per cent at the present time.

The assets mainly consist of (i) the land actually received, which constitute by far the most important factor in Agra, (ii) the calculated rental value of the lands held by the proprietors themselves or allowed to be rent free, and (iii) certain miscellaneous profits such as from valuable waste lands, income from grazing, fruits and produce etc. Of these three, the first two making up 90 per cent of the assets of the estate are the principal factors in the Government's estimate.

This is the general principle of the assessment in the Mahalwari Settlements in Agra, Oudh, and the Central Provinces, though there are differences in detail in the different provinces. Actual rates of rent paid at the time of Settlement, on the basis of the Agra plan. In the Central Provinces, the necessity of securing more perfectly an equality of incidence of revenue has led to the adoption of a peculiar method to be noted later on. In the Punjab, since much of the land is held by the proprietors or by tenants who pay in kind, a direct process of calculating cash rental cannot be followed. It is, therefore, necessary to ascertain a fair rate for all land of a given class on the basis of actual cash payments on the specimen holdings; and these representative values are applied to all the lands in the village.

* For example, in Orissa, in 1822, it was authoritatively declared to be 83·3 per cent of the assets; in 1840, 65 per cent, with a permissive reduction to 60 per cent, while at the re-settlement of 1861, it was brought down to 54 per cent. See Land Revenue Policy of the Indian Government, p. 13.

§ 19. *Mahalwari Settlement operations: in the United Provinces:—*

At the commencement of the settlement operations in the United Provinces, the Settlement officers inspect the villages and group them into assessment circles possessing general similarity of soil and physical character. The rent rate for each class of soil is then determined. The chief guide adopted for this purpose is the cash rental of the lands under ordinary crops and held by permanent and responsible tenants who depend for their livelihood on their holdings. The Settlement Officer then determines the cash rents in reference to the ascertained rentals after taking into account such factors as means of communication, increase in population, statistics and increase in the area cultivated.* For the cash rents, the Settlement Officer takes as his basis the cash rents paid in the village for similar lands or his estimate of the cash rental.

*system as applied to Oudh:—*The Oudh Settlement is by the same as in Agra in all its features including assessment except that the Settlement is only occasionally with the talukdars and in most cases single Talukdars are dealt with. The talukdar's estate comprising a greater or less number of villages. The revenue payment is based on the cash rental of the talukdar's estate as rent from each village in his estate. In some cases, as already seen, where the village communities have succeeded in preserving their rights, a 'settlement' with these is made, and the payment they have to make to the Talukdars is fixed so as to allow for the Talukdar's profit which is in no case less than 10 per cent of the Land Revenue.

§ 20. (2) *Mahalwari Settlement of the Punjab:—*Here we have the same system as regards survey, record of rights and so on, but there is a difference in detail, so far as the method of assessment is concerned. There is no considerable body of tenants and of such as do exist many pay in kind. The Settlement Officer, therefore, calculates direct revenue rates per acre for each kind of soil in the village estate, basing them on what the rental assets would be if a cash rent were uniformly paid. For this

* See Taxation Committee's Report, p. 51.

purpose, there is a division of the area into circles in each of which broadly distinguishable classes of soil are adopted. Then certain standard rates are fixed after taking a certain number of fair specimen holdings representing each kind of soil and finding out what they actually pay in cash, and failing this, what the cash value of the grain rental is. These standard rates are utilised as a general basis for the assessment. In the Punjab, though theoretically revenue is collected not from individual cultivators but from joint holders of village estates jointly and severally responsible for it, in practice, the share of revenue due from each is distributed and can be recovered separately. The cultivators, therefore, are generally in the same position as peasant proprietors in Bombay and Madras.*

§ 21. (3) The Malguzari Settlement of the Central Provinces :— The system in the Central Provinces, again, is practically the same as the one in Agra so far as the basis of assessment is concerned. There is, however, a difference in respect of one important particular. In the Central Provinces, revenues of the villages had been farmed out by the Marathas to individuals generally called *Malguzars*. The British Government's anxiety, however, to deal with individual landlords led to the conferment of a proprietary status on them and their recognition as heads of the villages, although the villages *here* were of the *Rayatwari* type as in Bombay and Madras, consisting of aggregates of cultivators each claiming exclusive ownership of his holding. Extensive protection had, therefore, been given to them having regard to the fact that from the position of proprietors they had been degraded to that of the tenants (or *Malguzars*). The Settlement officer, therefore, has not only to fix the revenue demand to be made from the *Malguzars* but also to determine the rents payable, by practically all classes of tenants, to the *zars*.† It is obvious, therefore, that the method of calculation

* See Taxation Enquiry Committee's Report, p. 52.

† "The fixation of rents, which is the most important settlement problem, is complicated by the increasing tendency on the part of the *malguzars* to allow rents to be fixed at a low figure and to exact *nazar* (bribe) on the leasing of land for the purpose of agriculture. See Taxation Enquiry Committee's Report, p. 23.

rental value must be more accurate than where it merely serves as a general basis for the revenue demand on the part of the Government.

The fixation of rents in the Central Provinces is thus a highly complicated process and is achieved by an elaborate system of grouping and soil classification according to what are called 'soil units' which are intended to be measures of the productive capacity of the soil. "The value is assumed to depend on the average net profits of cultivation, and to each class of soil in every position a factor is assigned expressing its value relatively to other soils, so that the soil unit varies, not only with the fertility of the soil, but also with the position of the land."^{*}

§ 22. (III) Rayatwari Settlements: (1) The Rayatwari system of Madras:—We may now consider the third great class of Settlements, viz., the Rayatwari Settlements, and begin with the Rayatwari system of Madras. Here, as we have already seen, attempts were made to introduce Permanent Settlement which appealed to Government, among other reasons, because it ensured punctuality of revenue payment. But these attempts ended in a disastrous failure, except in portions of Northern and Southern Madras where the Zamindars were the descendants or representatives of ancient lines of powerful chiefs. The system known as Rayatwari Settlement was, therefore, introduced after much discussion principally at the instance of Sir Thomas Munroe.

*Principles of Settlement in Madras:—*The principles of settlement in Madras are not embodied in any statute and are derived from executive instructions. There is an accurate survey of each estate and a village map with a descriptive register of all holdings prepared. The lands are classified according to the productive capacity of the soil which is estimated in terms of quantity of one of the ordinary grain crops. The grain value is converted into money value at a commutative rate based generally on an average of twenty non-famine years. From this the expenses of cultivation are deducted and

Commission Committee's Report, p. 51; for details see Baden-Powell, *Revenue in British India*, pp. 186–

get the *net produce of which about one-half is fixed as the maximum Land Revenue*. There are abatements allowed for traders' profits, and for the distance the grain has to be carried to the market and on account of vicissitudes of season and unprofitable areas. "After this, soils of similar grain values, irrespective of their classification, are bracketed together in orders called *taram*, each with its own rate of assessment. These rates are further adjusted with reference to the position of villages in which the lands are situated and the nature of the sources of irrigation. For this purpose, villages are formed into groups, in the case of dry lands, with reference to their proximity to roads and markets, and in the case of wet lands, with reference to the nature and quality of the water-supply. This accounts for different rates of assessment being imposed on lands of similar soils, but situated in different groups or under different classes of irrigation. The assessment thus fixed represents the commuted value of the Government share of the surface cultivation. But if minerals are discovered in the land, a separate assessment will be levied therefor."*

§ 23. (2) *Rayatwari System of Bombay*:- Unlike Madras Bombay possesses a *Land Revenue Code* which regulates all matters connected with Settlement. There are also special Acts deal with the special classes of estates, such as those of the *lukadars* in Gujarat, the *Khots* in the Konkan and the few villages of the *Khera* and *Broach* Districts.

In our general historical survey of Land Revenue, we made reference to the revenue administration of the Marathas and its deterioration under the last of the Peshwas as a result of the introduction of revenue farming. When the British took over the Deccan from the Peshwas, they decided to put an end to the pernicious farming system and go back to the more direct system of *Nana Farnavis*.

Mr. Pringle's Survey:-After various short-lived experiments and several proposals including a general village settlement, the *Mahalwari type*, the *Rayatwari* system was eventually adopted.

* Standing Orders of the Board of Revenue, Madras, Taxation Committee, p. 48.

ted. In 1825, Mr. Pringle was ordered to undertake a detailed survey of the land. He also tried to introduce *an elaborate law classification with extreme accuracy on the basis of net profits obtained*. This required an infinite mass of details and the whole experiment proved a failure on account of the high pitch of assessment in which it resulted. The intricate nature of the inquiry and the impossibility of supervising the army of subordinates entrusted with the work of collecting data, made the *apparently scientific investigation altogether unreliable*. What was really necessary was a large reduction of the existing assessments which were universally regarded as too heavy. The failure of the experiment was emphasised by a series of famine years which supervened.

Introduction of new system by Mr. Goldsmid and Lieut. Wingate.—Government therefore directed that the whole operations should be commenced *de novo*, and in 1836, entrusted the task to two officers, Mr. Goldsmid and Lieutenant Wingate. The system introduced by them, as modified from time to time is essentially the system now in force.* In 1840, they submitted their Report, in which they laid down the general principles for the basis of a survey settlement suited to the conditions of the Bombay Presidency. They recommended moderate assessment, settlement for thirty years, protection of improvements from taxation during the term of settlement, recognition of property in soil, free freedom of management with regard to sale, transfer and rent to be charged to sub-tenants etc. Later on, Captain David-son was appointed to collaborate with these officers and in 1847 issued a Report which is well known as *the Joint Report* in which they elaborated the principles underlying the present system.

According to the system which they followed, the basis of the classification of land as under Pringle's system was abandoned. The depth and the texture of the soil were taken into consideration instead. The assessment itself was regulated by general rates based upon general considerations as to the agricultural prices, prosperity of the land and so on, and was approved by the Land Revenue Assessment Committee, Bombay.

the fundamental principle being that no more should be asked from the cultivator than what he could easily afford to pay. The *Mirasi* and *Upri* tenures of the olden days were merged into a uniform tenure known as the *survey or occupancy tenure*. *The title of the cultivator to his holding was declared to be indestructible so long as he continued to pay the assessment. He was entitled to relinquish any fields or take up others so as to suit the extent of his liability to the means at his command.* His position and status have been defined in the Bombay Land Revenue Code on this basis. The tenure so created is known as *Rayatwari* under which the proprietary cultivator holds his land direct from Government. *Full occupancy tenure is heritable, transferable and otherwise alienable without the permission of Government.* The occupancy is liable to forfeiture for failure to pay the assessment. A guarantee is given that no additional taxation will be levied on account of improvements made by the occupant.[§]

§ 24. Main features of Settlement in Bombay:—The Rayatwari system of Bombay has the same general features as in Madras, such as demarcation of boundaries, the determination of survey numbers *which once fixed are not altered* and the classification of the soil, but the mode of assessment is different from that in Madras. The relative values of the soils are classified once for all according to their depth, texture, capacity for retention of moisture and other physical properties bearing on fertility, into several groups and expressed in fractions of a rupee, 16 annas representing the best class of soil. The object of this classification, unlike in Madras, is not to base the assessment on the net produce but merely to use it as a basis for the distribution of the total revenue demand fixed for the area on general considerations.

Three main steps in the process of fixing the assessment may be distinguished. (a) The first step is the grouping of the Talukas according to marked and permanent distinctions such as climate, situation and the general condition of cultivation. (b) The second step is the determination of the aggregate revenue

§ See Keatinge: *Rural Economy*, pp. 20-21.

* Vide *Land Revenue Policy of the Indian Government*, Ch. VIII for a more detailed description of the Bombay System.

demand for the area (usually a *Taluka*) with reference to its revenue and economic history. (3) The last step is the determination of the revenue liability from aggregate to detail which, as we have already mentioned, is carried out with the help of the *Anwar* classification of the soil which serves the purpose of a sliding scale. Thus, if the maximum rate be Rs. 3 per acre, for the 16-anna field, it would be Rs. 1-8-0 per acre on a field classified as 8 annas. The purely empirical character of the Bombay system is thus brought out by the fact that the decision of the Settlement officer as regards the revenue rates depends, "not upon the formal working out of results based on theory, but rather upon the subjective impressions of local knowledge and experience"* In recent years, however, the rental value as ascertained by records of leases and sales and other similar factors is being adopted as the basis for fixing the assessment in practice.†

There are certain restrictions as regards the increase in assessment as the result of a revision, according to which the increase is limited to 33 per cent on the total for a whole *Taluka*, 66 per cent on that of the village and 100 per cent on that of a single holder. Private improvements are protected, as already stated, being in theory entirely exempted from increased assessment, though for lack of clear specific instructions as to what is to be regarded as an improvement and what is not, it is complained that too much is left to the judgment of the Settlement Officer and improvements do sometimes get taxed. The system of Settlement in Berar is precisely similar to that prevalent in Bombay.

Sind:—In Sind, assessment rates depend entirely on the kind of irrigation made use of, as cultivation depends on irrigation in the almost complete absence of rainfall. The period of settlement also is shorter than in the rest of Presidency.

§ 25. (3) Special systems (in principle Rayarwari) of Burma, Assam and Coorg:—(i) *Burma*:—The present system in Burma

* *The Bombay Survey and Settlement Manual*, quoted in the Taxation Committee's Report, p. 31.

† See Bombay Government's Resolution on the Land Revenue Assessment Committee's Report, 1927.

is very much like that of Madras, being based on the *thathameda* and has replaced the earlier system under which, in Lower Burma, one-fifth of the value of gross produce was taken, in Upper Burma, the *thathameda* which was a kind of general tax was levied on private lands.

(ii) *Assam* :—In Assam, the only proprietors were the Permanent Settlement landholders of the older Bengal Districts and a few other permanent cultivators enjoying a title which is called landholder's title based on occupation of land for ten years before the Regulation of 1886 and after the Regulation on lease or grant of Settlement for ten years. A great deal of the land is also held on an annually renewed permit or *patta* or at least on a lease which is for less than ten years. In Assam, *waste land rules are especially important*, as hardly 25 per cent of the area of any district is under cultivation.

Tea gardens are held on leasehold tenure for long terms at low rates of assessment. After the expiry of the term of lease the land is liable to be assessed under the laws in force, provided that the rate cannot be higher than that payable on the most highly assessed lands in the district cultivated with any ordinary agricultural crop. The question of how the state should absorb at least a part of the increase in value which these lands are experiencing is engaging the attention of Government. §

§ 26. State ownership vs. Individual ownership.—Before entering upon a critical examination of the present Land Revenue system and the various controversial questions arising in connection with it, we shall dispose of a subject which is entangled in endless controversy but which is supposed—erroneously supposed as we think—to be so important that the decision in practically every important question relating to land revenue is taken to depend on the view we take on it. We are referring to the question whether the state is the universal landlord or there is indisputable private property in land in India. At the very outset, we may say that *no clear and unambiguous answer* can be given to the question that is thus propounded and secondly, that, in any case, for all

proposes, it does not very much matter whether we call the revenue a Rent or a Tax.

We shall proceed at first to discuss the question on the usual lines. The specific issues that arise have been stated as follows by the Taxation Enquiry Committee:—(1) Did the State claim exclusive proprietary rights over the land (a) under Hindu rule, (b) under Muhammadan rule? (2) Did the British Government succeed to any such rights? (3) Is the State now the proprietor of land held (a) on Zamindari or (b) on Ryotwari? (4) If not, are the Zamindars and Ryots, respectively, the possessors of the proprietary right subject to the payment of Land Revenue? (5) Should the Land Revenue be described as a tax or rent?

As regards the first two points, the opinion is generally held that the State never claimed exclusively proprietary right over the land before the British era and that, therefore, the British cannot be said to have succeeded to any such claim. In this connection, the views of Mountstuart Elphinstone, H. H. Wilson and Baden-Powell and also an elaborate judgment, in a case from Kanara disposed of in 1875, of the Bombay High Court are quoted. The judgment in question endorses the view of Wilson that the proprietary right of the sovereign derives no warrant from the ancient laws or institutions of the Hindus* and is not recognised by modern Hindu lawyers as exclusive or incompatible with individual ownership. Similarly, with regard to Muhammadan Law, Colonel Galloway summarised his conclusions as follows:—“The soil was the property of the cultivators as much as it could be. Law gave no power, policy gave no motive to remove him, to disturb him, so long as he paid his taxes. When he did not, his lands could be attached; and so can those of the first peer holding by the firmest tenure of the English Law. The right of the Indian husbandman is the right of possession and of transfer; and the rate of his land tax was fixed; often, indeed, the

* “Land is his who first cleared away the jungle, as the deer is his who first brought it down”, Laws of Manu, quoted by Baden-Powell: *L. R. in British India* p. 123.

amount. In what respect, then is his right of property inferior to that of the English landholder ? **

What holds good of Northern India and the practice of Muhammadan rulers, applies with greater force to the case of Southern India where the existence of private property in land was admitted even more unmistakably, especially in those parts of the country which never came under the Muhammadan yoke.

As regards the first two points, therefore, the Taxation Committee are unanimously of opinion that under both Hindu and Muhammadan rule, the State never claimed the absolute or exclusive ownership of the land and definitely recognised the existence of private property in it,†

During the period that intervened between the death of Aurangzeb and the firm establishment of British rule in this country, provincial governors and adventurers seemed to have put forward all kinds of extravagant claims. And the tendency to rack-rent which was the characteristic of this chaotic period made people less and less inclined to insist on the recognition of their private rights in land, their anxiety being rather to secure for themselves the freedom of relinquishing the land when they liked and thus escaping the revenue burden. The state put forward claims of exclusive ownership which the people did not care to contest. Thus Baden-Powell is probably right when he says, "It is hardly possible that Mr. James Grant, and Col. Munroe and many other could have been mistaken about the fact that *in their time*, (i. e. the time of the Permanent Settlement of Bengal) all Governments *did* claim to be landowners." (Land Systems in British India).§

* Quoted by the Taxation Enquiry Committee.

† Cf "Neither the Hindu nor Muhammadan sovereigns ever claimed to be proprietors of any part of the soil but of the waste, or of the lands escheating in default of legal successors; and they certainly never pretended to deny the proprietary right of the occupants". Brigg: *Land Tax in India*, p. 127.

§ The property right of the Crown in land is said to have been definitely asserted by Tipu Sultan. On the other hand, Mountstuart Elphinstone reporting on the *Mirasi* tenure under the Maharattas wrote as follows:- "That a large portion of the Ryots are the proprietors of their estates, subject to the payment of a fixed land tax to Government; that their property is hereditary and saleable, and they are never dispossessed while they pay their tax, and even then they have for a long period (at least thirty years) the right of reclaiming their estate on paying the dues of Government." See Report on the Territories conquered from the Peshwas.

However, weighing the historical evidence for what it is worth, we come to the conclusion that if we exclude the period of political confusion and disorder which immediately preceded British rule, private property in land was firmly established and acknowledged by the rulers. Of course, we do not forget the fact that at no time was India under a single undisputed ruler, and the country being split up into a number of small states each with its own history, we cannot assert that in every case the tradition of private ownership was definitely established, and if we are going to decide the claims of the British Government according to the pretensions of all the former rulers whom it ousted, we will have to say that the British Government has entered into a series of different heritages with regard to its interests and rights in land. But broadly speaking, the position was as we have stated it.

There is, however, no reason why the practice followed by previous Governments should tie the hands of succeeding Governments. From this point of view, we would have to examine the claims put forward by the British Government itself. But the British claims have neither been consistent nor uniform, although the general trend of their policy can be shown to have been towards admitting private ownership in land. Referring to the cultivated land in villages and estates (not the wasteland nor the particular lands of which government is admittedly the immediate owner) Baden-Powell observes, "The British Government has everywhere conferred or recognised a private right in land, and in large areas of the country,† (Bengal, Oudh, the whole of the Northern India for example,) it has expressly declared the proprietary right of the landlords and the village owners." It is, therefore, impossible any longer to put up a general claim that what the State has been taking as land revenue is really a rent from the landholders regarded as its tenants.

† This has, however, been sometimes officially disputed. It is urged that even in Bengal, the Zamindars have not been granted complete proprietary rights; that the Permanent Settlement was granted to them as a grace which was considered good policy, that it was not founded on the principles or practice of previous native Governments and that apart from the unalterable assessment, Government, still remain proprietors and the Zamindar an agent for collecting revenue or a tenant under Government.

It is generally agreed that so far as the Zamindari or landlord estates in Bengal and elsewhere are concerned, private property in land is beyond dispute. On the other hand, it is equally beyond dispute that Government have full proprietary rights on waste lands and over the *Khas Mahal* estates, such as those in Bengal and Bihar which are under the direct management of Government. It is with reference to Rayatwari lands that opinion is somewhat sharply divided. On the one hand, it is held that the position of the ryot or 'occupant' as he is called in Bombay is not essentially different from that of the Zamindar and that he holds land as full proprietor subject to the proviso that he pays the revenue assessment. *The fact that Government can take the land into their possession if the holder fails to pay the assessment does not prove that he has any the less right of property in it.* For, this is by no means an uncommon proviso and it applies in the case of all private property which Government can attach in the event of default. "The utmost that we can say is that Government regards the land as hypothecated to itself as security (in the last resort) for the land revenue assessed on it." One of the features which distinguishes Rayatwari from Zamindari lands, is that the former can be relinquished at the option of the holder. This, however, appears to be too slender a basis for the theory that the State is the real landlord in Rayatwari areas. This feature like the term "occupant" owes its origin to times when the cultivator harassed by exactions and oppressions was reluctant to be tied down to his land and made unconditionally responsible for the payment of the revenue demand. The option of relinquishing the land was a concession to the natural fears of the cultivator and was not due to any intention on the part of the British Government to withhold the right of ownership from him which, in fact, they were anxious to confer. Another point urged in favour of the theory of state ownership is that, in some provinces agricultural land cannot be put to non-agricultural uses without the permission of Government and is further liable to revised assessment when such use is allowed. This no doubt may be held to detract to some extent

* Baden-Powell *L. R. in British India*, p. 49.

from full proprietary powers but, on the other hand, it may be regarded as one of those restrictions on the use of private property, e. g., restrictions imposed in the interests of public health, which are common in all civilised countries. We may, therefore, endorse the view expressed by the Taxation Committee that both the Zamindars and the Ryots are possessors of proprietary right subject to the payment of land revenue, though in the latter case, it is not possible to arrive at an exact and general definition of the position of the landholder.† We may also refer to another view., viz., that the Indian conception of land tenure is a compromise between the English theory of absolute property in land on the one hand, and the other extreme of state ownership on the other hand. It is wholly neither the one nor the other but something betwixt and between. The position may be described as restricted government ownership or restricted private ownership. The landlord's or Ryot's title is acknowledged but subject to the limitation of the State's joint interest or concurrent right in land, and in Northern India subject also to the claim of the tenants to semi-proprietary rights such as that of fixity of tenure.¶

§ 27. Land Revenue : a Tax or Rent ? :—If private ownership of land is granted it seems to follow logically that the Land Revenue is a tax and not a rent. All the arguments advanced for or against state landlordism have by implication the same amount of cogency (or the lack of it) in deciding whether land revenue is a tax or a rent. We may, however, mention some additional points specifically brought forward in connection with the the Tax vs. Rent question.§ It is argued for instance, that land revenue *differs from a tax and is akin to a rent in that it cannot be altered according to the exigencies of the state during the long period for which it is fixed and in the concessions granted to the land revenue payers such as rent-free house-sites, the use of common grazing lands etc.* As against this, it may be urged that there is nothing to prevent the State from revising

† See Taxation Enquiry Committee's Report, p. 66.

¶ Morison: *The Industrial Organisation of an Indian Province.*

§ See Taxation Enquiry Committee's Report, pp. 66-67.

the rent annually except considerations of policy, expediency and economy. Further, it must be remembered that rentals on private lands are not necessarily fixed for a long term of years. In fact, it is notorious that many of the leases are renewable every year.* As regards rent-free house-sites, common grazing lands etc., all these concessions do not appear to us to be of a very important and decisive character in the present discussion. The Government in its capacity of an enlightened State and as concerned with the welfare of the cultivators may well grant facilities of this kind without thereby establishing the right of landlordship. A further somewhat trivial argument in support of the view that land revenue is a tax is that *the process of its assessment and collection* is similar to that in the case of a tax.

It is sometimes urged in order to prove that land revenue is not a tax that "whatever the position was originally, *the Government demand has in a great many cases been amortised in the purchase price when lands have changed hands and no longer operates as a tax on present holders.*" We fail to see the bearing of this contention on the nature of the land revenue. *It merely shows that the land revenue is amortised without answering the question whether it is a rent or a tax.* The process of amortisation is familiar in the case of other differential taxes on capital goods where we merely say that the tax has been paid once for all by the seller in the shape of a reduction of price equal to the capitalised value of the tax; we do not say that the levy is, therefore, not a tax but something else.

* Another answer is made by pointing out that there are many functions of a landlord which the State does not perform. This argument, however, seems to be of little use for the purpose for which it is advanced, because it may be quite legitimately urged that the State does, at the present time, perform certain functions which were discharged in the old days by the private landlord, viz., the preservation of peace and security and the protection of the cultivators. It also makes permanent improvements such as the construction of irrigation canals, drainage-cuts, roads, railways etc. Nor can we dispute state-landlordism merely on the ground of omission on the part of Government to execute functions attaching to the position of a landlord, for there are many private landlords who merely enjoy rents without performing any correlative landlordly functions.

Lastly, we may refer to another argument which has been advanced in favour of private proprietorship of land. *The Income Tax Act of 1886* exempted agricultural incomes and this, it is said, amounts to an implicit admission that landed incomes already pay a tax. If Land Revenue had been a rent, i. e., a payment to Government as landlord in recognition of their ownership, a further tax would have been justified.*

The above discussion shows that the whole question is highly complicated and does not admit of a categorical answer one way or the other, although the case for private ownership is very much stronger than that for state landlordism. We agree with Baden-Powell's verdict that the controversy is a "*profitless war of words*." It is *profitless because it is endless*. There are arguments for and against each of the rival theories and some people would be impressed by one set of arguments and others by the opposite set and this not necessarily owing to any conscious bias on either side. It is *also profitless because no important question of actual policy seems to depend on how it is settled*, and it is the practical aspects of the matter rather than the technical juridical position that are important. If land revenue is not so limited as to leave the proprietor something beyond the barest necessities of life, the full and unconditional admission of the ryot's proprietary right in his holding is absolutely worth nothing to him, just as, if all his present rights in land, of sale, mortgage etc. are left intact and Government assessment is moderate, it does not matter to him if Government formally considers itself as the universal landlord. Let us illustrate by a few instances the position that the whole discussion is of little practical importance. For exam-

* We must state, however, that this argument is not conclusive in favour of private ownership; because it is quite possible to argue that agricultural incomes are exempted from taxation as the number of cultivators in the enjoyment of incomes above the free minimum Income Tax limit, after paying Government land revenue, is comparatively small and it is not worth while trying to tax them; or secondly, it is open to Government to explain that the failure to assess landed incomes to the Income Tax is a mere omission which they may offer to remedy at any moment and lastly, it may be pointed out that in England, in addition to the land tax, Income Tax on agricultural profits is paid, but this does not render private property in land open to dispute in England.

ple, the question of legislative control on the executive in the matter of Land Revenue has practically nothing to do with the question whether government is the proprietor of the land. Even if the state were the landlord, the state does not mean merely the executive. How far one part of government, viz., the Legislature, should be allowed to interfere with the discretion of another part, viz., the Executive, is entirely a matter of administrative convenience and efficiency, and it may quite well be argued that, since the Land Revenue system touches the well-being of millions of people in this country, a more stringent control over it on the part of the Legislature is desirable. It is true that in a fully responsible government all taxes are necessarily voted upon by the Legislature, but this does not mean that no other charges than taxes proper can be voted upon similarly. The utmost we may grant is that the case for legislative control is somewhat reinforced by, without positively requiring, the hypothesis that Land Revenue is a tax and not a rent.

Again, it is sometimes said that if we admit State landlordism we would have to admit also *the right of the state to exact the full economic rent*. But this is a consequence from which we cannot altogether escape, even if we prove to demonstration that the State is not the landlord, because it is a universally accepted maxim of taxation that theoretically the whole of the economic rent may be absorbed in taxation without in any way hurting the tax-payer, provided we are quite certain that we have isolated the economic rent (the real unearned increment) and not included in it other elements, viz. wages, profits, and interest. The practical results will not be very dissimilar whether we profess to apply canons of rent or canons of taxation to the assessment of land revenue. This is seen by the fact that the Government, without definitely committing themselves to the view that land revenue is a tax and not a rent, saw no harm in instructing the Taxation Enquiry Committee to study the incidence of land revenue and to point out any defect in the system from the standpoint of the canons of taxation and even to suggest a complete change of system if necessary. As regards *arbitrary enhancements of assessment or rack renting*, no civilised state will think of justifying this species of oppression on the

ground that it is the landlord and is, therefore, legally entitled to charge what it likes for the use of land. The State cannot afford to stand merely on legal rights; it must be prepared to be judged by moral standards, and in fairness to Government in this country, it must be admitted that it has rarely sought to dispose of complaints about excessive assessment merely by taking shelter behind the theory of State Landlordism. It has generally tried to argue, whether successfully or not, that the land revenue is not really as burdensome as alleged by its critics. Even supposing that the State is the landlord, we must expect it to behave at least like an *enlightened landlord*, and if it does this, it would in its own ultimate interest, regulate the land revenue in such a manner as not to trench upon the legitimate profits of the cultivator and reduce his incentive to work or lower his efficiency. A benevolent and enlightened landlord would not, for instance, exact a rent from uneconomic holdings, because this would injure the cultivator and decrease the productivity of the soil. He would rather consolidate the holdings and would charge rent only when they are of such a size as to pay the costs and leave a surplus. The case for exemption of uneconomic holdings can, therefore, be argued quite as well on the assumption of Government landlordship as otherwise. The policy of a moderate levy receives further support from the consideration that *the State has no interests separate from those of the people*. The State serves itself best by serving the people because the State is the people.*

In connection with this controversy, it is worth while pointing out that there is an agreement on certain fundamental matters between people taking different sides in it. For example, although Government have sometimes coquetted with the theory of state landlordism, their actual policy has been to foster the development of a strong sense of individual ownership and they

* The presence of an alien bureaucratic Government, not till recently amenable to popular control to any appreciable extent, has helped this false antithesis between the State and the people. The gradual democratisation of the constitution may be expected to lessen the insistence on the notion that there is an inevitable clash of interests between the State and the people.

have generally been in cordial agreement with the view that it would be dangerous to do anything to disturb it. Even the Bolsheviks have been compelled to allow private ownership in land for fear of provoking revolt.* The average unsophisticated cultivator has no doubt whatever in his own mind that being free to sell, lease, mortgage and inherit landed property, Government landlordship, if he has ever heard of such a thing, is merely an empty name and he will not tolerate any serious interference with his present rights on the part of Government.† It is also generally agreed that in considering the incidence of taxation, land revenue should be regarded as a tax, and the Taxation Committee endorse this view on the ground that land revenue "forms a deduction from the national dividend, although they are divided in opinion as to whether or not the land revenue should be considered as a tax.§ This gives an authoritative reply to the old view, which has sometimes been expressed, that land revenue being a rent, should not be taken into account in calculating the burden of taxation in this country.

Further, all important questions of land revenue policy, such as the pitch of assessment, period of settlement, etc. can be and are being discussed without any sustained reference to the controversy as to whether land revenue is a tax or rent. Under these circumstances, we are of opinion that *it would be an act of political wisdom if Government were to declare in unmistakable terms*

* "They (the Bolsheviks) were not defeated by capitalistic necessitarianism, or by the military superiority of an aristocracy either in foreign or native organisation and armies. They were victorious over all these reactionary foes; their experience broke down, exactly as those of my way of thinking have always said it would break down, when it collided with the colossal institution of the private property of the poor ... The Bolshevik Government has survived by abandoning Bolshevism." Hellen D. Irvine: *The Making of Rural Europe*, Introduction by G. K. Chesterton, pp. 8-9.

† "The Ryot in Mewar is supposed to have ever in his mouth the common though expressive adage '*Bhogra dhanny raj ho, bhoomra dhanny maj ho*', 'the tax belongs to the king, the land belongs to me ' Briggs: *Land Tax in India*, p. 9) This attitude is not peculiar to the cultivator in Mewar but common to the ryots in all parts.

§ Taxation Enquiry Committee's Report p. 67.

that they fully recognise private property in land and abandon all pretensions to universal landlordism. We believe that, while this would set at rest much futile and embittered discussion and make assurance doubly sure in the minds of the people, the admission need not in any way be inconvenient from the fiscal or any other point of view.

§ 28 **Permanent vs. Temporary Settlement:**—The great distress from which large numbers of the people suffered in India, due to the serious and widespread famines which visited the country towards the close of the last century attracted attention to the Land Revenue policy of Government, which was criticised generally and province by province by the late Mr. R. C. Dutt, who along with certain European retired members of the Indian Civil Service presented a memorial on the subject to the Secretary of State. Mr. Dutt a little previously to this (1900) had also addressed his 'Open Letters' to Lord Curzon, whose Government published an important Resolution in 1902 replying to the criticisms and outlining their general policy after considering the reports submitted by the Provincial Governments.

One of the points urged by Mr. Dutt was that if the Permanent Settlement had been introduced forty years previously i. e., when its extension was proposed by Lord Canning in 1860, India would have been spared the "dreadful and desolating famines" of the close of the 19th century. Mr. Dutt attributed to the Permanent Settlement the prosperity of the Bengal Ryots, their resourcefulness and greater resisting capacity in years of bad harvest, the promotion of agricultural enterprise, investment of private capital and its accumulation and devotion to useful industries, public institutions and works. We have already given a short account of the introduction of *Permanent Settlement* in Bengal and elsewhere and the unsuccessful attempts made from time to time for its extension to other parts of the country, and although it does not now count as many adherents as it once did either among officials or non-officials, it is *not altogether a dead issue yet*. For example, a number of witnesses who gave evidence recently before the Bombay Land Revenue Assessment Committee (1924-25) declared themselves in favour of Permanent Settlement. It may, therefore, not be

amiss if we set out briefly the arguments for and against it with particular reference to its operation in Bengal.

A sharp difference of opinion has existed for a long time with regard to the merits of the Permanent Settlement and its effects in Bengal. Those who uphold it contend that it has been brilliantly successful in Bengal. (a) Financially, they say, it has ensured to the State a *fixed and stable revenue* without the necessity of incurring heavy expenses in connection with periodical re-assessments and collection. (b) Politically, it has secured the *loyalty of the Zamindars*. (c) Socially, it has enabled the *Zamindars to act as the natural leaders of the ryots* and to show their public spirit in a practical manner by helping the spread of education and sound ideas on sanitation and in other ways. (d) Economically, it has secured *agricultural enterprise and prosperity* and a resourceful peasantry which has shown a remarkable power of resistance in times of scarcity. (e) Lastly, the Permanent Settlement has *avoided the evils associated with Temporary Settlements*, such as the *harassment of the cultivator at the time of revision*, the *expensive machinery* required for re-settlement, the *tendency of land to deteriorate* towards the end of the term of Settlement due to the deliberate neglect on the part of the cultivator so as to escape enhancement of assessment, *impediments to industry and improvements* and the concentration of *arbitrary power in the hands of revenue officials* not liable as yet to legislative and judicial control.

Arguments against P. S. :—(a) The most obvious as well as the most important argument against Permanent Settlement is that it involves *the sacrifice on the part of the State of all prospective increase of revenue from land*. The advantage of a fixed and stable revenue is secured at too great a cost. To understand the full force of this contention, it need only be mentioned that, whereas at the time of the introduction of Permanent Settlement in Bengal the gross rental was approximately 4½ crores, of rupees, the estimated figure for 1900 was 16½ crores of rupees.* And if we allow for the subsequent rapid rise in prices, we will have to take a very much higher figure for the present time, and yet the

* Land Revenue Policy ; p. 46.

state continues to derive a fixed amount of revenue in terms of rupees which, moreover, represent a smaller purchasing power than in 1793. This is today a tremendous handicap to the Bengal government and inhibits state activity in many directions in which it is required. *The expectation that as a result of the Permanent Settlement other sources of State income would grow has not been realised to anything like the extent hoped for.* The community has thus been deprived of its legitimate right to share in the increasing prosperity of the Zamindars, which is largely not the direct result of the landlords' own efforts but is due to social factors beyond their control, such as the growth of population, improved communications, rise in prices etc. (b) *The political argument that Permanent Settlement has secured the loyalty of Zamindars has clearly lost whatever value it once possessed in the past.* Moreover, it must be remembered that the landlords as a class in the provinces where perpetual settlement was not granted have been thoroughly as loyal as in Bengal. (c) *As regards the hope that was entertained about a powerful class of wealthy and benevolent landlords acting as the natural leaders of the Ryots and exerting themselves for their uplift, it is generally recognised that it has not been realised.* On the contrary, "while there are many worthy liberal-minded and enlightened landlords in Bengal—as there are also in other parts of India—the evils of absenteeism, of management, of estates by unsympathetic agents, or unhappy relations between landlord and tenant, and of the multiplication of tenure-holders or middlemen between the Zamindar and the cultivator in many and various degrees, are at least as marked and as much on the increase there as elsewhere." (d) *As against the alleged agricultural prosperity of Bengal under Permanent Settlement, it is argued that it is due to quite other facts, such as the protection which the tenants enjoy from the operation of special Tenancy Laws, the comparative immunity of Bengal from uncertainties of climate, the excellent means of communication, the practical monopoly of jute which it enjoys and trade and enterprise which flow from Calcutta.* This view, however, was vigorously challenged by Mr. Dutt who, while admitting that the Tenancy Laws were needed to complete and confirm the good work done by the Permanent settle-

ment protested against the official suggestion that the Permanent Settlement did no good whatever until the Tenancy Laws were passed, and cites the authority of distinguished statesmen like Lord Wellesley, Minto, Hastings and others against it. (e) Lastly, as regards the allegation that a revision settlement is attended with much dislocation of village economy and considerable harassment to the cultivator, it is argued that *the work of revision is now effected with much greater ease and rapidity than was formerly the case* on account of the long experience that has been gained. The system of Land Records, the preservation of boundaries, and a more or less permanent classification of land very greatly reduce the volume of work and fresh investigation at the time of each re-settlement, which, moreover, comes after a fairly long period, generally varying from twenty to thirty years. Therefore, the disturbance in the rural economy is the minimum possible and there has been latterly considerable economy in the expenditure incurred by Government. An attempt is also made to eliminate petty underlings and to entrust the major portion of the necessary inquiry to responsible and highly placed officials who are sympathetically inclined towards the cultivator. Further, private improvements are protected against enhancement of assessment either permanently or for an adequately long period, so that the fear of enhancement of assessment need not deter the cultivator from undertaking improvements. It is also claimed that the rigidity of collection which is almost a corollary of Permanent Settlement has been avoided in the system of Temporary Settlements by an increasingly liberal operation of the rules in regard to the suspension and remission of land revenue. Thus, the present-day Temporary Settlements are claimed to possess many of the good features of the Permanent Settlement without its drawbacks and to achieve a happy compromise between the legitimate claims of the state and the rights and convenience of the agriculturists.

The official view with regard to Permanent Settlement today is that the question of its extension to the areas temporarily

* See Taxation Enquiry Committee's Report, pp. 69-70.

settled at present in unthinkable. As Lord Irwin said not long ago, since Cornwallis's time India's place in commerce and the markets of the world and the growing intricacy of her financial and social problems have brought many new factors into the picture necessitating elasticity of public revenue and expenditure. Government are being constantly asked to undertake new tasks and improve old ones. But this requires greater and greater command of funds and it would thus be impossible for the state to forego its legitimate share of the increment in the value of land. While we hold that the present systems of Temporary Settlement are by no means perfect, we not only endorse this view, but, with Dr. Paranjpye, would like Government to make an effort to revise the System of Permanent Settlement in Bengal and elsewhere, to secure fairness in the distribution of the tax burden and elasticity of revenue. We are aware that this reform would be denounced by some as nothing short of sacrilege involving the violation of a solemn pledge and contract. But we plead that after a lapse of a century and a quarter, the original contract has lost its meaning and ceased to be equitable, and that vested interests must not be allowed to prevail indefinitely over the common good. "The promise given was a necessity of the past; the word broken is a necessity of the present." This is one of Machiavelli's maxims expressed with characteristic frankness, but nobody will deny that it has a core of sound practical wisdom, especially when we reflect that "the past" and "the present" we are now thinking of are separated by a long and eventful interval of over a century.

§ 29. Term of Settlement:—There is a considerable diversity of opinion as to whether the term of Settlement should be as short or as long as possible. There are some who advocate as brief a period as 10 years and others would like to see it extended to no less than 99 years. The argument in favour of a *short period* is that it enables the state and the community to benefit by absorbing their proper share of any unearned increment which general progress may have brought into existence—an argument particularly applicable to those tracts where the economic resources are fast developing—and on the other hand, in the event of declining rents and prices, it makes possible a lowering of the

assessment and a speedy relief to the agriculturists. It has also been urged that short-term settlements excite less discontent by making the people familiar with more frequent but small increases than the large enhancements that are likely to come at the close of too long an interval. On the other side it is pointed out that long terms of settlement are less disturbing to the revenue payer and have the advantage of increasing the resources of the people and enabling them to make improvements without fear of having to forego the benefit from them on account of higher assessment. Assuming a well-conceived and scientific system of assessment, the period of settlement would depend on a balance of these opposing considerations and it is impossible to say off-hand with precision that a particular period and no other is the ideal period. The general feeling, however, at present in India is that, having regard to all the circumstances, thirty years would in most cases be the period to aim at. As the Bombay Land Revenue Assessment Committee observe, "Thirty years is a generation in the life of the agriculturist. If he knows at the beginning of this period that his assessment is subject to an enhancement at the hands of Government, he has.....ample time to assimilate his expenditure and his mode of living generally to the ratio of assessment he is called upon to pay, while, if in the course of the settlement period the value of his land increases, prices show a steady rise, and facilities of markets and communications improve, his economic condition is such that he can prepare himself for a reasonable enhancement of rent at the succeeding revision settlement."

§ 30. Principles of assessment:—As we have already seen in our survey of the different settlements in India, there is no single system of clearly recognised and consistently applied maxims of assessment of land. The basic principles differ from province to province and they are further modified by the introduction of a number of miscellaneous factors and a large amount of discretion is allowed to the Settlement Officer. While in the United Provinces, the Punjab and the Central Provinces, the theoretical basis of assessment is the economic rent, and in Madras and Burma, the net produce, Bombay does not even profess to have any definite principles of assessment and follows a frankly

empirical system depending upon general economic considerations as they impress the settlement officer. The element of arbitrariness thus introduced has been the chief point of criticism against the Bombay system. Latterly, however, rental values are being relied upon in an increasing measure as the basis of assessment in Bombay.

§ 31. Ricardian theory in relation to the Land Revenue in India:—

As we have seen above, the principles governing assessment vary from province to province so far as their formal statement is concerned. *The general claim of Government, however, is that, in the net result, the Land Revenue forms, everywhere in British India, a certain moderate proportion of the economic rent.* This is clearly not the case if we take into account the large number of uneconomic holdings whose existence is not disputed by Government. Here, as Professors Wadia and Joshi remark, "The land tax is not the appropriation of the unearned increment of the soil, it is the appropriation of the bare minimum of subsistence left to the cultivator."^{*} In other cases, if in actual practice no more than the pure economic rent is taken, this could come about only by accident and not by design, since, in calculating the so-called surplus, not all the elements entering into the cost of production are deducted from the gross value. For example, the labour of the cultivating proprietor and his family is not allowed for in every case. Actual rental values on which the revenue rates are based in Northern India, are apt to be very much higher than the true economic rent[†] in a country, where agriculture is practically the sole occupation of the people and

^{*} *Wealth of India*, p. 281.

[†] Suppose 50 per cent of the rental value is taken as Land Revenue. The annual rental value is, say, Rs. 150 and the true economic rent is Rs. 100. Under these assumptions 50 per cent of rental value is 75 p. c. (a very much higher percentage) of economic rent. But there is perhaps not much harm in this so long as the assessment does not exceed the economic rent. There is, however, no guarantee that this will happen. For if the rental value is still higher than we have supposed (owing to even greater severity of competition among the tenants etc), say, Rs. 220, instead of Rs. 150, Government assessment would be Rs. 110, i. e. it will not only absorb the whole of the economic rent but will further eat into profits and wages to the extent of Rs. 10.

where there is no competition as between a variety of occupations for the available labour and capital. The cultivator sticks to the land although he may have to pinch and starve in order to pay an excessively heavy rent. "With alternative occupations in the shape of industry and handicrafts there can be no doubt that a large number of holdings cultivated under the pressure of necessity today would be thrown out of cultivation."* Rental values are also unreliable as indices of economic rent because the land hunger due to pure economic necessity is further strengthened by the *traditional sentiment in favour of investment in land*—a sentiment which can weaken only when there arise a variety of equally safe alternative openings for the investment of capital through the development of industry. The economic rent in the Ricardian sense bears no certain and definable relation to the assessment, though we are not prepared to say that in every case the land revenue impinges on income that is not unearned. Nor can we accept the contention that merely because land revenue is the first charge on the produce of the soil, it cannot be part of the economic rent,† which latter, according to the Ricardian theory, is the last charge on the produce. Because, when we say that economic rent is the last charge, we are not thinking of the sequence in time of the different payments but the sequence in the economic analysis of rent. Just as wages, although they ultimately come out of the produce due to labour are yet paid in advance, similarly the rent charge may be realised before the surplus accrues, although in anticipation of its accruing. The true line of criticism would be to point out that assessment is sometimes charged and exacted when there is no chance of a surplus and is not refunded or excused when the expectation of a surplus, however just, is not actually realised. The system of suspension and remission of revenue cannot be guaranteed to operate, and does not in practice invariably operate, so that the assessment should in no case trench upon any portion of the gross value which is not the true economic rent or unearned income.

§ 32 A new basis of assessment:—The Taxation Enquiry

* Wadia and Joshi: op. cit. p. 281.

† See, however, Wadia and Joshi, op. cit., p. 281.

Committee recommend that hereafter a *uniform basis of annual value should be adopted* in every province and that the function of the settlement officer should be confined to the determination of the annual value under such conditions as may be required by the special circumstances of each province. By annual value they mean "the gross produce less cost of production, including the value of the labour actually expended by the farmer and his family and the return for enterprise." In the case of rents controlled by Tenancy Laws or by custom having the force of law, or where the rent is fixed by the settlement officer, it is recommended that such rent should be taken to be the annual value. The plan of annual value seems to be an improvement in the right direction as it will *put an end to the vagueness* of the principles of assessment prevalent at present. Annual value, as we understand it, is not the same thing as actual competitive rental value which may be too high, if the competition amongst the tenants is excessive owing to absence of other occupations and the tradition and force of sentiment in favour of agriculture, or in rare cases it may be too low where, for example, tenants and landlords conspire and deliberately depress rents in order to escape their proper share of the burden of assessment. The basis of annual value is also more scientific inasmuch as it allows for the labour of the cultivator and his family and also for return for enterprise.

§ 33. Rate of assessment: a recommendation:—As regards the proportion of the annual value to be taken, in imitation of the example of other countries, the Taxation Committee recommend the adoption of *a comparatively low standard rate which should not exceed 25 per cent of the annual value*. As there would be difficulties about the immediate adoption of this recommendation owing to the absence of definite information as to the percentage of annual value actually taken in the various provinces, they suggest *a preliminary expert inquiry* for ascertaining the rate at present exacted, before a common rate for each province is fixed by its Legislature.

In addition to the standard rate, *taxation for local purposes* by local bodies is also recommended by the Committee and it is further suggested that the *maximum* for the ordinary local rates should be in the neighbourhood of *25 per cent of the land*

revenue. Having regard to the fact that the local bodies would be composed largely of agriculturists and landlords and the fact that the proceeds of the local rates would be spent on matters connected with the improvements in the locality itself, it is anticipated that the sacrifice would be less reluctantly made, than if it is imposed in the form of an enhancement of land revenue utilised for general purposes by Government. The system of local rates superadded to a flat standard rate on land has been found to work satisfactorily in most European countries where it is in vogue.

§ 34. What should be the limits of Enhancement? :—In order to prevent too sharp an enhancement of the assessment, some further limit would seem to be needful. And we approve of the recommendation of the Bombay Land Revenue Assessment Committee to the effect that the limit of enhancement should be a general all-round limit of 25 per cent without distinction between groups, villages or holdings as at present, provided that the Talukas in question have already undergone a second revision.

§ 35. *Application of principles of taxation to Land Revenue:—
 (a) The first canon of taxation, namely, that of *certainty*, may be said to be satisfied, land revenue being fixed for the period of the Settlement. The cultivator knows exactly what he has to pay although, in so far as the *basis* of assessment is still *vague*, there is an *element of avoidable uncertainty* at the time of revision of assessment. The introduction of a uniform basis of settlement as suggested above will largely remove this source of uncertainty.
 (b) The next canon is that of *convenience*. In order to satisfy this, the land revenues is collected, as already shown, in instalments suitable to the cultivator. There is, however, a certain amount of sacrifice of the principle of convenience to that of certainty, because the settlements are based on averages, the actual assessment fixed representing an average of what may be fairly demanded in good and bad years taken together. The assumption is that the agriculturist would save up during years of good harvest in order to meet the deficiency in bad years. This assumption, however, is not true to facts. Consequently, the average assessment is felt to be too rigid and oppressive in

* See Taxation Enquiry Committee's Report, pp. 69-75.

years of scarcity. The system of suspension and remission of revenue, as we have already remarked, is not worked with sufficient elasticity and according to the Taxation Committee, the inelasticity of the land revenue system has driven a large number of people to the money-lender during bad seasons. *Another source of inconvenience, which is more or less inevitable, arises from the long term of the settlement, which, however, we have advocated on other grounds. The cultivator adjusts his standard of living on the basis of the land revenue he has to pay during the currency of a settlement and if the assessment is appreciably enhanced for the next settlement, he finds it difficult immediately to adjust his family budget accordingly, though the long term settlement is granted on the assumption that he would get enough time to prepare himself for a possible enhancement. An attempt is made to mitigate the hardship arising from this source by the progressive and graduated imposition of large enhancements and also by limiting their extent.** The disturbance due to the process of re-settlement, has been, as previously stated, reduced to a minimum by the gradual perfection of the system of *Land Records*, though in some cases this process may take years of meticulous enquiry to be completed.

(c) As to the canon of *economy*, the heavy expenses on the revenue establishment concerned that is maintained cannot be debited entirely to the work of assessment and collection of land revenue, much miscellaneous work of an important character outside the purview of land revenue proper being still discharged by the revenue agency.

(d) As to the canon of *ability*, the official claim is that it is being increasingly satisfied on account of the progressive reduction in the share of the state. We have already given the figures in support of this contention. One of the results of the discussion about Land Revenue policy initiated by Mr. R. C. Dutt† was

* See Land Revenue Policy of the Indian Government, pp. 38-40.

† Mr. R. C. Dutt suggested that the heaviness of land revenue assessment was one of the most important causes of the famines which visited the country during the last century, especially towards the close of it. As to the connection between land revenue and famines, our views are analogous to those advanced in relation to the similar controversy regarding the connection between land revenue and indebtedness. We hold that land revenue can only be regarded as a minor cause of famines as it is of rural indebtedness and for similar reasons.

the conversion of the standard rates into maximum rates. The Taxation Committee give figures showing how the tendency for the State's share to diminish has continued to operate from 1903 to 1924. During this period, while prices rose by 117 per cent, the land revenue rose by 20 per cent. Besides, part of this rise in revenue must have been due to the increase in the area sown by about 7 per cent.

As regards the *incidence of Land Revenue*, owing to the variations in the systems followed between province and province and even between one district and another, it is impossible to obtain any general idea. Five possible criteria may be applied, viz., (1) the ratio borne by the land revenue to the population, (2) the ratio borne by the land revenue to the occupied area, i. e., the average assessment per acre, (3) a comparison of the assessment per soil unit, (4) the ratio borne by the assessment to gross or net produce and (5) *the ratio borne by the assessment to rents or annual value*. The Committee accept the last as the least unsatisfactory method, but even in this respect, owing to the absence of full and reliable data they are unable to arrive at any definite conclusion regarding the actual burden of assessment in the different provinces.

§ 36. Principle of formal justice.—This principle is *violated* under the present system of land revenue, because in the first place, there are *inter-provincial*, and, as we have remarked, even *inter-district disparities*, and in the second place, *incomes from land are differentiated for purposes of taxation from other sources*. (i) *Inter-provincial disparities*:—Taking the first point, the *Permanently settled areas are at present obviously much more lightly taxed than those under the Temporary Settlement*. As regards the latter, in the Punjab, in eleven districts recently settled, the percentage of land revenue to net rental varies from 19 to 36 per cent, with an average of 25. In the United Provinces, it varies from 20 to 42 per cent, with an average of 27. In the Rayatwari provinces, in the case of Bombay, the percentage of assessment to rent varies from 17 to 50 in different parts of the Presidency. In Berar, in the case of two cotton talukas, recently settled, the average is 10 per cent. In Madras, it is

apparently in the neighbourhood of 17 per cent, in half of the districts.* These figures are not absolutely accurate, but they are sufficiently reliable as indications of the existence of very considerable inequalities in the burden of assessment in the various provinces. The dictates of formal justice would be satisfied if the recommendation of the Taxation Committee with regard to the adoption of a uniform standard of 25 per cent of the annual value as the share of the State is carried into practice.

(ii) *Land Revenue compared to Income Tax*:—Coming to the second point, a comparison between the Land Tax and the Income Tax discloses three striking differences as regards the manner of treatment of the two kinds of income. One is, that in the case of land, there is *no tax-free minimum* as there is in the case of Income Tax, and the second is, that the *percentage of the tax to the income is very much higher* in the case of land revenue. The third difference, the only one in favour of the Land Tax, is the *absence of progression*. There are two ways of assimilating the two classes of taxes; one way is to make the Income Tax conform in all particulars to the Land Revenue and the other is to change the Land Revenue so that it resembles Income Tax in every way. The first course is not feasible and would be a retrograde step because it would entail the abandonment of the sound principles of the exemption limit and of graduation. Let us, therefore, examine the implications and the practicability of the second course and consider, in the first place, the effect of *exempting incomes from land below the Income-Tax-free limit of Rs.2000*. This must at once be rejected as *entirely visionary and impracticable* at the present moment, because it would touch the financial solvency of the State; a similar conclusion will be forced upon us as regards the second difference noted above and the principle of formal justice will have to be sacrificed to the principle of productivity or practical expediency. Even if the recommendation of the Taxation Committee in favour of standardisation of the Land Revenue at 25 per cent of the annual value, with additions in the shape of local rates, is given effect to, the percentage will be higher than in the case of non-agricultural incomes (if we exclude from this cate-

* See Taxation Committee's Report, pp 76-77.

gory a small number of very high incomes which are liable to pay more than 40 per cent by way of Income Tax and Super Tax). The principle of progression may, however, be applied to Land Revenue, as in the more advanced European countries and Japan, where agricultural incomes are assessed to the income tax or are liable to death duties.*

On the whole, therefore, *a complete assimilation of Land Revenue to the Income Tax is not a matter of immediate practical politics*, and for some time at any rate, the former will have to be treated for purposes of taxation as a thing *per se*. This, however, does not mean that it should for ever, be allowed to stand outside the normal process of taxation. *Land Revenue as well as Income Tax, which is by no means perfect as it stands, must be gradually modified till they both conform to the same sound principles of taxation.* A sound tax (1) must not remove or imperil any instrument of, or incentive to essential or useful processes of production and (2) must not remove or impair any essential or useful element of consumption.† Obedience to these principles implies that *only unearned surpluses*, whether they arise from land or other sources, *should be taxed* or, if both unearned and earned incomes have to be taxed, the latter should be taxed at a very much lower rate than the former.§ The whole of the unearned in-

* The Taxation Committee accepting the view of Dr. Gregory consider that the land revenue is essentially a tax on things and not persons and that, therefore, it is not susceptible to the direct application of the doctrine of progression. (Report, p. 72).

† See J. A. Hobson: *Taxation in the New State*, p. 10.

§ In the case of Land Revenue, the working of this principle may be illustrated thus:—Suppose the rates of taxation for earned and unearned incomes are regulated according to the principle that all earned incomes below Rs. 2,000 per year are to be exempted; that earned incomes over Rs. 2,000 are to pay at the rate of 5 per cent and unearned incomes at the rate of 50 per cent. Suppose there is a fairly big landlord farming his land himself instead of leasing it out. After paying all the costs, excluding his own wages of management and interest on his capital, let us suppose his net receipts amount to Rs. 2,000, of which Rs. 1,000 represent the ordinary return on enterprise and capital and the remaining Rs. 1,000, the true unearned surplus. His earned income being below the exemption limit he would pay nothing on it and Rs. 500 on the unearned portion of his receipts. If the earned income is Rs. 3,000 and the unearned Rs. 1,000, he would pay

come may theoretically be absorbed by the State, although only a certain percentage may be fixed, so as to err on the side of safety and to allow for practical difficulties in the way of accurate calculations of the size of the unearned income. The present system of Income Tax is faulty because it taxes earned as well unearned incomes at the same rate. The Land Tax is faulty in that it taxes the smallest agricultural incomes from holdings which are admittedly uneconomic. Furthermore, in theory, the Land Revenue is supposed to be a portion of a surplus, but obviously in the case of uneconomic holdings there is no surplus and yet they are assessed to the land tax. This raises the question how far it is practicable to exempt from land revenue holdings, which are below a certain size. Here again, we are up against the difficulty that an immediate exemption of all uneconomic holdings would involve Government in very great financial embarrassment. There is also another consideration, viz., that people have been used to the Land Tax in this form from times immemorial and it is acquiesced in and paid without demur, and, therefore the injustice is not vividly felt by the tax-payer. At the same time, there is no doubt that if we wish to rationalise our system of taxation, uneconomic holdings will have to be exempted sooner or later, and also earned incomes from land below a certain minimum identical with that which, under an improved system, may be deemed suitable for non-agricultural incomes.

One of the objections raised against the exemption of uneconomic holdings is that it would encourage fractionisation, but we do not consider this objection as very forcible; the proper remedy for dealing with the evil of fractionisation is, as we have already seen, to do so directly by suitable legislation and not indirectly by a manipulation of the land revenue system.

§ 31. **Legislative Control:**—The principle of legislative control of matters connected with land revenue is, it must be remembered, not novel in any sense in India. There

Rs. 50 on the former and Rs. 500 on the latter. The argument would be precisely the same if he lets his land on lease and takes so much "rent" per year. The tax he will bear will depend on the proportion of earned and unearned income entering into the rent he receives.

is already, in some Provinces like Bombay, an attempt on the part of the legislature to regulate the administration of Land Revenue by *special statute* like the Bombay Land Revenue Code. But the *present situation is unsatisfactory* in as much as in some provinces, there is no legislative control whatever, whereas in others, where it does exist, it is of the most meagre description, and it is necessary to extend it, in order to redeem the Land Revenue system from the charge of executive arbitrariness which is made against it.* In this connection, the following words of the Joint Parliamentary Committee (1919) are worth quoting. " The Committee are impressed by the objections raised by many witnesses to the manner in which certain classes of taxation can be laid upon the people of India by executive action, without in some cases any statutory limitation of the rates, and in other cases, any adequate prescription by statute of the methods of assessment. They consider that the imposition of new burdens should be gradually brought more within the purview of the legislature. And in particular, they advise that the process of revising the land revenue assessment ought to be brought under closer regulation by Statute. The Committee are of opinion that the time has come to embody in the law the main principles by which the land revenue is determined, the method of valuation, the pitch of assessment, the periods of revision, the graduation of enhancements and the other chief processes which touch the well-being of the revenue payer. " The Committee thought that this was essential before the subject was transferred to the Ministers after securing adequate representation to the rural classes on the Legislative Councils. This recommendation has provoked a good deal of discussion in the Provincial Legislatures which are considering measures for closer regulation by law of the (1) principles of settlement and the determination of the standard rate of assessment ; (2) the limitation on enhancement at revision settlements ; and (3) the period of settlement. In Bombay, the Land Revenue Assessment Committee was appointed in June 1924, in accordance with a resolution passed by the Legislative Council in

* See Sir Sankaran Nair's Minute of Dissent, Government of India Despatch on the Constitutional Reforms of 1919.

1924. The non-official members of the Committee have strongly recommended that a *Standing Advisory Committee* of the Legislative Council should be set up to examine all revision settlement proposals and that, if the recommendations of the Committee are not accepted by Government, the proposals should not be put into force without express sanction of the Legislative Council. Such a Committee would be highly desirable in view of the *natural bias of the executive towards stressing the financial point of view* to the prejudice of the revenue payer. The Official objection to this proposal is firstly, that the work of settlement is too technical to be properly understood by an amateur body of advisers and secondly, that the members of the Advisory Committee are likely to resist even moderate proposals for enhancements in order to catch rural votes and to please their constituents. The first objection is not so strong as it appears at first sight, because the *settlement technique is not so abstruse and complicated* as to be beyond the ken of non-official members, especially if they are experienced in agrarian problems: and, in any case, their lack of knowledge could be helped by the *inclusion in the Committee of one or two official experts*. As regards the second objection, it is *unfair to suppose that the non-official members would be incapable of taking an unprejudiced and independent view* from a wider standpoint than that of placating the rural voter, and besides, *the bias of the non-official to oppose enhancement will serve as a much-needed counterpoise to the opposite bias of the executive*. It is too late in the day to resist legislative control on the ground that a revenue settlement is entirely a matter for the executive. The legislatures are in no mood to accept such a taboo and have already busied themselves considering the details of legislative control, and failing an authorised body like the Advisory Committee, there is likely to be much embittered and possibly irresponsible discussion in the Councils on the Settlement policy of the Government. A settlement report is undoubtedly not suited to discussion by the whole body of the Legislative Council. The only way of avoiding this, however, is to accept an advisory body in whom the Legislative Council and the constituencies would have sufficient confidence. It is, therefore, to be regretted that the Bombay Government, influ-

enced by the objections raised by the official members of the Assessment Committee, have not seen their way to the inclusion of the proposal in favour of the Standing Advisory Committee in the forthcoming Bill for bringing the Land Revenue Administration under stricter statutory control.*

* *Vide* G. R. of 1927 on the Report of the Bombay Land Revenue Assessment Committee.

CHAPTER XIII

INDUSTRIES.

§ 1. Industrial history of India during recent times :—We have already traced* the industrial history of India up to about the end of the 19th century. And we have seen how she was, roughly till the beginning of the 19th century, both a manufacturing and an agricultural country, how Indian industries had attained a high stage of perfection judged by contemporary standards, but how they began to languish from the end of the 18th century as a result of several unfavourable influences, such as the adverse policy of the East India Company and the British Parliament and the competition of machine-made goods from England and elsewhere, and how their decay led to a progressive ruralisation and loss of the economic equilibrium of the country. We have also seen how a slight reverse movement was initiated from the eighties of the last century by the inauguration of modern industrialism under the auspices partly of European and partly Indian enterprise. We have further noted how this new movement was, for various reasons, very slow and not sufficiently strong to counteract the ruralisation of the country that was proceeding apace side by side. Since the eighties of the last century, and more particularly from the beginning of the present century the backwardness of India in industrial matters had begun to attract the notice of patriots and economists like *Dadabhai Naoroji* and *Ranade* and it was held responsible for the recurrent famines from which the country suffered and the grinding poverty of the masses of which the famines were a symptom. *The Famine Commission of 1880* had hit the right nail on the head by pointing out that one of the main reasons for the recurrence of famine in India was the *absence of diversity of industries* and insisted upon this being remedied. A similar diagnosis of the situation was presented by the *Famine*

* See Chapter V above on Economic Transition in India.

Commission of 1901 and an identical remedy proposed. The opinion began to gain ground that nature had not destined India to remain for ever dependent on other countries for manufactured goods. Even the few industries that happened to have struck root in the country without the assistance of Government owed much to foreign capital and enterprise. This was a position which could hardly be regarded as satisfactory from the national point of view. The feverish activity of the Government in Japan which had brought that country into the forefront of industrial nations within a marvellously short period stood in painful contrast with the apathetic attitude of Government in this country. The Cotton Excise duties imposed towards the close of the last century under pressure from Lancashire lent colour to the suspicion that Government was more than merely indifferent to industrial development in India. Under these circumstances, it is not surprising that the economic discontent due to the poverty of the masses and the lack of industrial outlets to educated middle-class youths began to assume a political complexion. The institution of the Indian Industrial Conference in 1905 in association with the Indian National Congress was the first definite sign of the alliance between economic and political discontent—an alliance which was immeasurably strengthened in the agitation for securing the annulment of the partition of Bengal. “The Swadeshi Movement was the positive and the boycott the negative expression of the same purpose.” A great wave of industrial enthusiasm overran the whole country. Numerous factories for the manufacture of textiles, hosiery, pencils, cutlery, matches, glass etc. were started, but most of them came to grief for lack of practical training and even more owing to want of business experience, and lastly because, the state did not raise its little finger to prevent their collapse. The policy of differential railway rates was allowed to continue to the prejudice of Indian manufactures. Competition from abroad was permitted to run its course unhindered by protective tariffs or other means. This attitude was not entirely due to the

* See Montague-Chelmsford Report p 211.

Laissez-Faire doctrines which had for some time been the official creed. It was also caused by the association of boycott with the *Swadeshi* movement which alienated the sympathies not only of Government but also of many private individuals. The failure, to whatever causes it may have been due, undoubtedly emphasised the lesson that, in this country, there was no chance for the industries without the strong and vigorous backing of Government, at least in the initial stages of their development. Thus in the pre-War period Indian industries were very poorly developed. Practically the only large organised industries on a stable footing were the Cotton Mill Industry of Western India, the Jute Industry of Bengal and the Coal Mining Industry of Bihar and Orissa and Bengal. It is necessary, however, to take note of one highly important step in industrial advance under Indian enterprise, viz., the inauguration of the Tata Steel and Iron Company at Sakchi (Jamshedpur) which was founded in 1907 and commenced operations in 1912. Other miscellaneous industries such as Cotton Gins and Presses, Jute Presses, Paper Mills, Rice Mills, Sugar Factories, Petroleum Refineries, Leather Works, Engineering Workshops etc. had also come into existence but they were not of sufficient magnitude or importance to deserve more than a passing reference here.

§ 2. Survey of the Policy of the State in relation to industrial development:—We may, at this point pause, to take a brief review of the various changes which state policy has undergone in relation to industries in India. It has already been noted how the *East India Company's commercial instincts* made it at first favour the improvement of those industries on which its export trade depended. But this policy had to be abandoned owing to the pressure of vested interests in England, and India came to be looked upon primarily as a valuable source of the raw materials necessary for the developing the manufactures of England. This attitude, a legacy of the old colonial policy, survived some time after the Company had ceased to be a trading body and even after its extinction and replacement by the direct rule of the Crown in 1858. What was at first dictated by self-interest, came later to be fortified by the predominance of the *Laissez-Faire* theory about this time both in England and in India. The

interest of the State in industrial development did show itself occasionally but in a very fitful and haphazard manner and it was ridiculously inadequate to the needs of the situation. For a long time, it did not go beyond a very imperfect provision of technical and industrial education and the collection and dissemination of commercial and industrial information. A few industrial exhibitions were held and a certain number of provincial monographs on Indian industries were published, and so far as there was any activity on the part of the State, it was rather due to the energy of a few exceptionally far-sighted individual officers than to any considered and comprehensive policy laid down by Government. A change, however, was gradually coming over the policy of the Government and the first sign of it was the creation in 1905 of a separate Imperial Department of Commerce and Industries at the instance of Lord Curzon. In the meanwhile, individual Provincial Governments like those of the United Provinces and Madras had begun to put forward programmes of industrial policy requiring close co-operation, help and guidance from Government. For example, the Madras Government, encouraged by their successful experiment in the aluminium industry, had committed themselves to an increasingly active participation in industrial development, which had resulted in considerable impetus being given to handloom weaving, the introduction of the chrome process of manufacturing leather etc. A special officer was appointed to supervise and stimulate technical and industrial education. But all these creditable efforts, which had already provoked the interested opposition of the European commercial community in India, received a sudden check by the 1910 Despatch of Lord Morley, the then Secretary of State who, true to his *Laissez-Faire* creed, deprecated direct attempts on the part of Government to start new industries even for the sake of experiment and demonstration and with the object of eventually transferring them to private enterprise. "The policy, which he was prepared to sanction, was that State funds might be expended upon familiarising the people with such improvements in the methods of production as modern science and the practice of European countries could suggest. Further than this the State should not go, and it must be left to private enterprise to demon-

strate that these improvements could be adopted with commercial advantage."* This dictum of Lord Morley damped the enthusiasm of the Madras Government who now proceeded to better their instruction and retraced their steps farther backwards than was necessary.† Lord Crewe, the successor of Lord Morley, pointed out that the Madras Government had placed too limited a construction upon the Despatch of 1910 by restricting their efforts to the provision of industrial schools. The new Secretary of State declared himself prepared to follow a somewhat bolder policy, but it was now the turn of the Government of India to be oppressed by doubts as to how far they would be justified in sanctioning proposals for demonstration plants, financial assistance and other forms of direct state aid to industries. They were further hampered by the absence of the necessary organisation and equipment which, they said, prevented them from giving effect even to the ultra-cautious policy sanctioned by Lord Morley. The obvious retort to this would, of course, be that the necessary organisation and equipment should have been created.§ However, whatever the reasons for it, it is a fact that *Government failed to turn to account the enthusiasm for the regeneration of national industries caused by the Swadeshi movement* which on its constructive side was a healthy movement but which fizzled out for lack of Government support and other causes.

§ 3. Industrial development during the War:—Matters drifted in this way till the period of the Great War, which proved an eye-opener in many ways and brought about a more vivid realisation of the danger of dependence on foreign supplies even for

* See Indian Industrial Commission's Report, pp. 78-79.

† Pandit Madan Mohan Malaviya does not wholly subscribe to the view expressed by the Majority Report of the Industrial Commission with regard to the "deadening effect produced by Lord Morley's dictum of 1910," and points out that although Lord Morley deprecated state-managed commercial enterprises he was in favour of funds being applied to the establishment of well-equipped technical and industrial schools. But Government in this country failed to do anything substantial even in this direction. See Dissenting Minute, Industrial Commission's Report, pp. 313-14.

§ Pandit Malaviya's Dissenting Minute.

the necessities of life. *The cutting off of the enemy countries from the import trade and the almost complete withdrawal from it of the allied countries on account of their pre-occupation with the war seemed to open out exceptional opportunities for the development of Indian Industries.* But neither the public nor the Government were ready to take any considerable advantage of this favourable situation, created by the virtually complete though temporary elimination of foreign competitors, and they had the mortification of seeing these opportunities grasped by Japan and the United States whose participation in the import trade of this country increased enormously during the War. These countries were in a position to obtain a firmer footing in the Indian market because they had already reached a high stage of industrialisation. India, on the other hand, was labouring under various handicaps such as the great difficulty of obtaining essential machinery and materials, which she herself had not learnt to produce, the scarcity or total absence of technical and chemical experts, the shortage of skilled labour and of railway waggons, coasting vessels, coal and coking plant.²

Further, the *military importance of developing the economic resources* of the country was brought to light by the War. It was realised that, *while the services rendered by India in the Eastern theatres of the war were valuable, they would have been vastly greater if the country had been industrially developed.* "Now-a-days, the products of an industrially developed community coincide so nearly in kind though not in quantity with the catalogue of munitions of war that the development of India's natural resources becomes a matter of almost military necessity."[†] All these considerations resulted in the appointment of the *Industrial Commission* in May 1916 for examining the whole question of industrial development in India, and indicating new openings for the profitable employment of Indian capital in commerce and industry and the manner in which Government could usefully give direct encouragement to industrial enterprise. The Report (1918) of this Commission, which was presided over by Sir Thomas Holland, particularly stressed the importance of the active assistance of

² See Indian Munitions Board's Industrial Handbook, p. 16.

[†] See M. C. Report, p. 213

Government for furthering the industrial development of the country with the aim of making India more self-sufficient. To this end, it considered it necessary that the Government should be provided with an adequate administrative equipment and should command reliable expert advice on scientific and technical matters. One of its main recommendations, therefore, was in favour of the creation of special industrial and chemical services and the establishment of Provincial Boards of Industries.

§ 4. The Indian Munitions Board:—In the meanwhile, the Indian Munitions Board had been established by the Government of India in February 1917, "to control and develop Indian resources, with special reference to the needs created by the war, to limit and co-ordinate demands for articles not manufactured and produced in India and to apply the manufacturing resources of India to war purposes with the special object of reducing demands on shipping." Although, under the terms of reference, the Board was required to concentrate its energy on its primary object of assisting the prosecution of the War, especially in the Eastern theatres, it was able, within the limits set, to foster the development of indigenous industries in various ways, such as (1) direct purchase of articles and materials in India; (2) the diversion, by means of the Priority system and control over Home Indents, of all orders from the United Kingdom and elsewhere to manufactures in India; (3) assistance to individuals and firms who desired to import plant or engage experts or skilled labour from abroad and (4) the dissemination of information and expert advice to persons prepared to establish new industries in India.* In this manner considerable stimulus was given to various industries notably Cotton, Jute, Iron and Steel and Leather manufactures as also a number of other industries such as engineering industries, manufacture of chemicals, mineral acids, oils, paper, glass, cement, cutlery, fertilisers, paints and varnishes, surgical instruments etc.† The adoption of the system of Home Indents and the Priority Certificate by the Munitions Board was

* Industrial Handbook, p. 9.

† See Panandikar: *The Economic Consequences of the War for India*, pp. 103-109.

tantamount to the acceptance of the principles of *Swadeshi*, for the time being, on the part of Government, and these new departures from the traditional policy of *Laissez-Faire* showed how much could be done in India in the sphere of industrial development with the active co-operation and assistance of Government. Departments of Industries were started by the end of the War in all the Provinces as recommended by the Industrial Commission and the Munitions Board was merged in the Imperial Department of Industry and Commerce. The Chemical Services Committee was also appointed as suggested by the Industrial Commission.

§ 5 Introduction of Protective Tariffs:—A large part of the stimulus received by Indian industries during the War was, however, necessarily temporary in character and ceased to operate with the cessation of the war purchases of Government and the re-appearance of normal trading relations with other countries, which were resumed after the Armistice in November 1918. The Indian manufactures were again subjected to the full force of foreign competition helped by the absence of any protective tariff barriers except those which had been imposed for revenue purposes in the shape of enhanced import duties which were levied under the financial stress caused by the War. Under these conditions, the long-standing demand for a revision of tariff policy again became more vocal and insistent than ever. The subject of tariff policy had been excluded, much against popular wishes, from the terms of reference of the Industrial Commission, on the ground that it was not desirable at that juncture to raise any question of the modification of India's fiscal policy. The support lent by the distinguished authors of the M. C. Report to the view that, since the theoretical free trader hardly existed in India, considerations of justice and fairness required that Indians should have full liberty of deciding their own tariff policy and that Government had no right to force their free trade convictions on them, strengthened the hands of the protectionist party in India. Of similar tenor and significance, was the recommendation of the Joint Select Committee on the Government of India Bill, 1919, that a convention in favour of *fiscal autonomy* should be established. This was subsequently accep-

ted by the British Parliament. The question of regulating inter-Imperial fiscal relations on the basis of a *system of preference in favour of goods of Empire origin*, which the War had brought into prominence, threw into relief once more the general question of tariff relations of India with other countries. The Committee of the Imperial Legislative Council appointed by the Government of India in February 1920, to report on the feasibility of Imperial Preference and the future fiscal policy of India declared its inability to make any definite recommendations on the latter question and suggested a special Commission of Inquiry for the purpose. This eventually led to the appointment of the *Fiscal Commission* in October 1921 under the presidency of Sir Ibrahim Rahimtoola. The policy of *Discriminate Protection*, to be administered through an expert body called the *Tariff Board* recommended by the Commission, was accepted by the Government of India early in 1923. In accordance with that policy, a Tariff Board has been instituted and has already examined and in some cases granted the claims for protection of several industries such as Iron and Steel, Cement, Paper, Cotton etc.

The indifference of the State towards industrial development which has so long seemed to lie as a blight on the economic aspirations of the country has thus been definitely abandoned and instead of repeating the barren formulæ of *Free Trade* and *Laissez-Faire* in the sphere of industry, Government is putting forward positive efforts to help industrial development to proceed along sound lines. Non-official opinion, however, would favour even greater activity than is being displayed by the Government, in order to bring about more rapid industrialisation. We believe that with proper guidance on the part of the State, the country is capable of travelling a long way in the direction of industrialisation within a comparatively short time. We do not agree with Mr. Calvert's opinion that "Little but failure and disappointment will result from any attempt to compress six hundred years of the industrial history of Europe into a short period of state-subsidized activity." The recent industrialisation of Ger-

† Calvert : *The Wealth and Welfare of the Punjab*, p. 176.

many and Japan within a marvellously brief span gives the lie direct to such a contention. A similar argument is often advanced "in the sphere of politics and it is suggested that what took England a thousand years of constitutional evolution cannot be achieved in India in a generation or two. But the experience of one country and the possibility of other countries learning from it ought to shorten the period of evolution in the latter, and this applies to economics as well as to politics.

§ 6 Industrial backwardness of India;—That the present position of India as regards industries is very backward needs no labouring. There is a *limited development* of industries but it is in the first place, very *uneven* being restricted only to those industries which have appeared to offer safe and easy profits. For the rest, commerce has been preferred to new industrial ventures as a profitable mode of investment.* In the second place, as the Fiscal Commission observe, "the development has not been commensurate with the size of the country, its population and its natural resources." Even as regards those industries which have been established in the country firmly, for example, the Textile Industries, there has been an almost *exclusive reliance on foreign imports for the supply of accessories, stores and machinery etc.* The facility with which they could be imported on account of the anxiety of industrially advanced nations to secure the huge Indian market, combined with the policy of free trade, made the establishment of these industries a matter of very great difficulty. Government's policy of *placing indents for their miscellaneous stores with the India Office*, encouraged by the absence of a Stores Purchase Department in India, was not calculated to improve matters in this respect. India thus found herself without the basic equipment necessary for a stable industrial organisation in the form of the metallurgical and chemical industries. Iron and Steel and the Engineering Industries existed on a negligible scale. India could not boast of so much as "a machine to make nails or screws, though she could build a

* Industrial Commission's Report.

† Fiscal Comm. Report, p. 23

locomotive or a marine engine, provided most of the necessary parts were obtained from abroad,"* Chemical industries for the manufacture of acids and alkalis of industrial importance were practically non-existent and thus severely handicapped such indigenous manufactures as paper, matches, oils, explosives, dyes and textiles which were compelled to depend on foreign chemicals. The position today remains substantially as it was before the War in spite of certain ameliorations due to recent attempts to remove these deficiencies. Another serious industrial deficiency has been the scarcity of foremen, engineers, technical and chemical experts owing to the unsatisfactory nature of the facilities for industrial training in India. and the consequent dependence on foreign skilled labourers, technicians and experts.

§ 7. Potentialities:—There are thus many gaps to be filled and strenuous endeavour must be made in order to remove the numerous handicaps which we have mentioned. The task, however, is not an impossible one, especially if the State comes forward and assumes a more venturesome role than hitherto. India, as we have already seen, possesses immense natural resources—vegetable, animal and mineral, as was illustrated by the part she played during the war by supplying manganese, tungsten, mica, jute, copra, lac etc. Her sources of power have been already described and we have seen that, although her position with regard to coal, wood-fuel or oil for the purpose of generation of power is not so favourable as is sometimes imagined, there are immense possibilities of utilising her large rivers and water-sheds and harnessing them to industrial uses. Her forest wealth is immense and the development of modern means of transport and research in forest products, together with a larger investment of capital are likely to result in a stimulus being given to industries based on the great variety of the forest products of the country. So far as man-power is concerned, it is true that, compared to European labour Indian labour is inefficient, intermittent and floating in character, but it is abundant in quantity and is capable of improvement under a proper system of theoretical and practical technical training, better

* Indus. Comm Report, p. 45,

housing in industrial areas, welfare work, Trade Union organisation and so on. There is also the *paucity of competent managers* and as Mr. Calvert observes, "the best training for the future manager is to be acquired in the mill and amongst the men he is to manage. The art is picked up in the atmosphere of industry".* Since the atmosphere does not exist at present on any appreciable scale, the country will have to follow the *example of Japan* and import foreign managers when necessary, and, more important than this, send out young men to foreign lands to receive the requisite experience and training. A time will surely come when the required atmosphere here will be created in the country and recourse to either of these methods would be superfluous. *Indian capital* has long enjoyed the reputation of being too shy but it may be confidently expected to be less and less timorous, if reasonable assurances are forthcoming that it can be invested with security and profit. The striking success of the loan operations of Government in the Indian Money Market during and after the War and the successful flotation of a considerable number of joint-stock companies in the post-War period, together with the fact that, recently, considerable investment of Indian capital in sterling securities has been brought to light, are further evidences of the fact that the shyness of the Indian capital is a fast vanishing quantity. The improving banking organisation of the country, the assurance of a large home market and the post-War enthusiasm for the industrial renaissance of India should further help in drawing out the savings of the people for purposes of productive investment in modern industries. The *differential rates policy* followed by the Indian Railway Companies—an evil, the existence of which was admitted by both the Industrial and the Fiscal Commissions, has long been a grievance of the Indian industrial and commercial community, but the gradual transfer of the principal Railway systems to *State management* and the creation of the *Rates Tribunal* are calculated to remove this grievance and make railway administration more sympathetic and helpful to the progress of industrialisation. The problem of improving *inland road communication* which is extraordinarily defective at present, especially in rural areas, is being tackled and Provincial and

* Calvert: *Wealth and Welfare of the Punjab*, p 168.

Central Road Boards have been created and a Roads Committee has been sitting for some time and is expected to suggest a programme of vigorous road construction. The Constitutional Reforms have inevitably brought about a change in the attitude of the State, which, as we have noticed above, will make it more and more helpful in the work of industrial revival.

§ 8. Benefits of Industrial development* :—The benefits which will accrue to India from industrial development are so obvious as scarcely to need formal statement. We have had many occasions of commenting on the great poverty of the Indian masses and the many weaknesses in our economic system to which it is due.

(a) One of these weaknesses is the excessive concentration of the productive energies of the people on one single occupation, viz., agriculture. An adequate development of industries will remedy this situation and make for a *more even distribution of the population among a variety of occupation*, and ensure a more stable national economy. It will thus make *the problem of famine* much less serious than it is at present by drawing off a certain proportion of the surplus numbers at present engaged in agriculture.†

(b) Secondly, the greatest benefit that will follow from the establishment of industries will be an *increase in the national dividend*, for we are arguing on the well-justified premiss that it is possible to start a number of industries in this country which are economically sound. This will enable the masses to raise their standard of living which in its turn will increase their efficiency and hence their productive capacity. A beneficent circle of action and reaction will thus be set up.

* See Fiscal Commission's Report, Ch. IV.

† The Fiscal Commission point out that industrial development will not directly mitigate the effects of famine or widespread failure of rain, because famine in this sense brings in its train depression in industries and causes a general decrease of purchasing power. The labour that is disengaged from agriculture because of failure of rains will not be absorbed by industries which will themselves be suffering from a serious curtailment of demand. This, however, does not invalidate the contention that industrial development will make the effect of drought less serious because the proportion of population normally engaged in agriculture would be smaller than it is now.

(c) Thirdly, industrial development *will improve the taxable capacity* of the people through the increase in the national dividend and will enable the State to finance several schemes of national regeneration which are at present held up for want of funds. It is also clear that a diversification of industry will make the system of *taxation much more elastic* than at present, for example, taxes on agriculture like Land Revenue are incapable of ready expansion; taxes on other sources, of which the Income Tax is the most outstanding instance, are to a large extent automatic and bring in additional money into the State coffers without much difficulty.

(d) Another important advantage of industrialisation is its *favourable reaction on national character* and the scope it gives to diversity of aptitude and talent. It supplies an *antidote to the intellectual inertia and conservatism* which characterise a predominantly agricultural country, unless agriculture also is organised on industrial lines as in the United States and Denmark. Generally speaking, an industrial population is intellectually more alert and towns have always been the centres and radiators of civilisation and culture. As Maitland says, "There be thoughts which come to men when they are tightly packed."* Industrial training will act as an effective offset to the absence of a sufficiently *practical grasp of affairs* which characterises the products of the too literary system of education which prevails at present and will generally enable the people better to shoulder the new responsibilities which the reformed constitution places on them.† .

It will further go a long way towards supplying a solution for the serious problem of *middle class unemployment* which today exists on a distressingly large scale in India. The young men will be relieved from the necessity of depending exclusively on Government service or a few over-stocked professions such as law, medicine etc.§

(g) We have already referred to the *military importance of greater economic self-sufficiency* to India as well as the Empire,

* Quoted by Carr-Saunders : *Problem of Population*, p. 425.

† See M. C. Report, p. 212,

§ *Ibid.*

An Industrial India with its resources properly exploited will be a tower of strength to the Empire, not only from an economic but also political point of view, *quite apart from any system of Imperial Preference, which it may not suit India to enter into.*

(h) Further, the unprofitable *habit of hoarding* which, although it is generally exaggerated, must all the same be admitted to exist, is likely to give way with greater opportunities for investment and the prospect of making handsome profits, which industrial expansion will open out. The joint-stock organisation of modern industry tends to utilise small amounts of individual savings which would otherwise lie dormant. There is the further consideration that *wealth which is accumulated in industrial enterprises is more readily available for further employment as capital* than similar amounts acquired, say, by way of agricultural profits.

(i) Lastly, an extension of industry by increasing the output of national wealth will increase the resources of the people in general and more particularly, of that section of the people engaged in industrial production as *wages and profits in industry are generally higher than in the case of the agriculture.*

§ 9. Reactions of Industry on Agriculture :—The reactions on agriculture of industrial expansion would be *almost wholly beneficial.* One reason for the languishing condition of Indian agriculture is, as we have seen, a deficiency of capital. This shortage of capital is likely to be remedied by the *accumulations in industry being made available for investment in agriculture.* We may recall in this connection that the great advance of English agriculture during the period of the Industrial Revolution was financed by the profits made by the commercial and industrial magnates. The strong sentiment in favour of investment in land is sure to attract a considerable portion of the earnings of successful business in much the same way as this happened in England owing to the great political and social status that went in that country along with the possession of land.

The effect on *agricultural wages* will be to raise them, especially in areas adjoining centres of industrial activity. One of the consequences of industrial advance would be a multi-

plication of towns and cities, and we have already noted that *the propinquity of urban areas has a great revivifying effect on rural populations* making them more progressive. Again, agriculture in its capacity of provider of raw materials needed for industry is sure to receive an impetus to enhanced production to meet *the ever-increasing demand of the expanding industries.*

It is sometimes argued that the development of industries by drawing off a portion of the population from the land will lead to a diminished food-supply. In this connection, it is important to consider whether a transfer of population from agriculture to industries is likely to take place in the near future on such a scale as to produce an appreciable effect on the total numbers at present engaged in agriculture. And *having regard to the fact that at the present moment the industrial workers are not very much more than one per cent of the agricultural workers, it does not seem likely that even with a very rapid development of industries this proportion will be seriously affected in favour of industry and against agriculture.* Secondly, the belief has been widely held, since the time of the Famine Commission of 1880, that there are more people on the land than are really required for its thorough cultivation and their withdrawal should, therefore have no effect on the actual volume of food-supply. Lastly, we are looking forward to *an era of improved agriculture* which will enable a smaller population not only to maintain production on the present scale but to increase it considerably owing to the adoption of up-to-date methods. We must further remember that a curtailment of food-supply will bring its own remedy as *a smaller supply will mean higher prices which in its turn will bring about larger production.* The fear, therefore, that is sometimes expressed that agriculture would come to occupy a subordinate place as a result of industrialisation is without any foundation and, in any case, *we must not make a fetish either of agriculture or of industry.* Whether agriculture occupies the first or second place is after all immaterial so long as the nation divides its labour and capital between the two in such a manner as to maximise the national dividend; although it is true that even if we make the greatest amount of wealth per head as our only criterion, *agriculture is so much suited to the conditions of this country that it will never be a sound business proposi-*

tion to neglect it altogether in favour of industry, and there is no reason to doubt that it will always retain its importance in India. This will be even more so if we allow weight, as we very well might, to the *non-economic arguments in favour of agriculture*, viz., that it helps to maintain a sturdy and prosperous yeomanry which is the strongest bulwark of the state making for political stability and acting as a counterblast to the radical and revolutionary ideas likely to prevail in a country with a purely commercial and manufacturing population.*

The controversy of Agriculture vs. Manufacture is thus *pointless and unreal*. We have seen that agriculture stands vastly to benefit by industrial development and it is equally true to say that the prosperity of industry is bound up with that of agriculture if for no other reason at least because the agriculturists in India will be the principal customers for the products of Indian industries. †

§ 10. Capital for Industries:—This may be discussed under two headings: (1) Indigenous Capital and (2) External Capital.

(i) *Indigenous Capital*:—We have remarked above that the indigenous capital supply of the country is tending to improve both in point of adequacy and venturesomeness, especially since the period of the War. This is evidenced by the increase in Government Rupee loans from Rs. 145 to Rs. 358 crores and in the paid-up capital of Joint-Stock Companies from Rs. 80 to Rs. 254 crores, between 1913–1914 and 1923–24, § and

* "What all countries now require are not more town-dwellers but more land-bred folk. They require them for defence, They require them for purposes of national health; they require them for steadfastness in the midst of the shifting developments of a neurotic age. Without an adequate supply of land-dwellers to replenish and support their city population, people must deteriorate and in due course fall." Rider Haggard quoted by Sapre in his *Economics of Agricultural Progress*, p. 49. The ideas expressed here have a particular application to countries like England which have gone too far in the direction of urbanisation for national safety. In India, safety at present depends on more and not less urbanisation.

† "It is not a question of Agriculture vs. Industry, but of the two great occupations expanding side by side, with agriculture always necessarily taking the lead." Calvert: *The Wealth and Welfare of the Punjab*, p. 186.

§ See *External Capital Committee's Report*, p. 4.

to 277 crores between 1913-14 and 1925-26. Although the position thus revealed is gratifying, there is still a very great scope and need for further improvement as regards the increase and employment of the indigenous capital resources of the country, without which industrial development in India will be greatly retarded. This question has assumed great importance in view of the fact that industrial activity is no longer restricted to a few channels, such as those provided by the Cotton and jute Mill Industries, but is in quest of other numerous fields as exemplified by the establishment of the Tata Iron and Steel Works and the contemplation of a large number of ambitious schemes, for instance in connection with the greater utilisation of the water-power possibilities of the Western Ghats; the additions to the existing steel works; the creation of a group of subsidiary concerns to convert the output of the steel works into manufactured products; the production of machinery and mill accessories etc.*

All these schemes require vast amounts of capital and it is necessary to take proper steps to tap all the dormant capital in existence at present. In order to understand how this might be done we must undertake a preliminary examination of the nature and extent of the capital available in the (a) mofussil and in the bigger (b) commercial towns and the manner in which it is employed.

(a) In the mofussil, there is hardly any organisation of capital owing to the practical absence of suitable banking facilities. The extension of commercial joint-stock banking presents special difficulties, although the position in this respect has been eased to some extent by the establishment of a number of branches of the Imperial Bank at the principal district towns. The Post Office Savings Banks and latterly also Co-operative Banks have been able to tap a portion of the rural savings, but on the whole, the village money-lender remains practically the only supplier of capital for the local needs of the agriculturists, artisans and petty traders. It is very rarely that he employs his capital in

* See Indus. Comm. Report
I. E...61

new enterprises. Some local enterprises have, indeed, been started with local capital, especially flour mills, ginning presses in cotton tracts and rice mills in the rice deltas in Burma and on the Coromandel Coast. These have, however, been multiplied to such an extent that the profits derived from them can scarcely be called attractive from the business point of view. A large part of the savings of the well-to-do agriculturists are locked up in *jewellery and hoards* as shown by the fact that the net imports of gold and silver into India between 1913 and 1924 amounted to Rs. 482 crores of rupees.¹ Government officials and professional classes favour *investment in land* either by way of purchase or mortgage, though the banking habit is growing very much faster in the case of these classes than amongst agriculturists.

(b) In the *Presidency and commercial towns*, the situation is somewhat more satisfactory. There are better banking facilities and greater readiness on the part of the people to invest savings in industrial and commercial enterprises, and, generally speaking, a well-considered and sound business proposition promoted by men of standing and technical knowledge does not fail to attract the necessary capital. But even here, difficulties are not altogether absent. The existing banking system is too inelastic from the point of view of industrial finance. The Imperial Bank is virtually prohibited from financing industries under the existing law. The Exchange Banks carry on a lucrative business in foreign exchange to which all their capital is devoted and, moreover, most of them are foreign in management and capital. This precludes them from coming to the assistance of Indian industrial enterprises for lack of the necessary contact with indigenous industries and knowledge of Indian conditions; nor can they be expected to be very sympathetic to the needs of industrial development in this country.* The Indian Joint-Stock Banks have generally shown a tendency to adhere to orthodox commercial banking resting on short-term finance and the experiments made by some of them, (for example, by the Peoples' Bank of Lahore which went into liquidation in 1913 in the opening years of the present century), to combine

* External Capital Committee's Report, p 4.

† Cf. K. T Shah: *Indian Currency, Exchange and Banking*,

ordinary commercial banking with industrial banking proved a failure owing to the locking up of short-term deposits in long-term business which it involved and also to the mistake, which was generally made by the banks, of sinking far too great a proportion of their funds in a single industry.

We thus reach the conclusion that even in towns there is no adequate provision for long-term finance required by industries. A few Industrial Banks have been started, but the most important of them and the one which at first appeared to hold out the brightest prospects, viz., the *Tata Industrial Bank* after a somewhat ineffective and inglorious career soon abandoned the industrial side of its work and contented itself for a while with ordinary commercial banking and foreign exchange business, until it was eventually merged in the Central Bank, which is a purely commercial bank.

The difficulties of financing industrial enterprises apply with special force to the case of small middle-class *entrepreneurs*, who unlike big industrial magnates and joint-stock corporations, cannot furnish the security of stocks or approved names. Co-operative credit is not suited to their case, being useful only in the case of small artisans like the weavers. Under these circumstances, there has been an insistent demand for some financial assistance on the part of the State directly or indirectly by some such means as guaranteed dividends, direct loans, purchase of finished products and so forth.

The chief method that commends itself to the Industrial Commission is the establishment of special Industrial Banks in India. They consider that the establishment of such Industrial Banks working on approved lines is of sufficient national importance to justify Government assistance. They point out that, what is required is a bank which can keep in touch with small industrialists, is able to estimate the prospects of a fairly extensive range of industries and possesses funds which it can afford to lock up for a time in security not readily realisable. They further recommend the appointment of a special expert Committee to lay down a definite scheme in this connection and to define the methods of state assistance to such banks. They contem-

plate that, whatever other assistance Government might give, they should *through the Departments of Industries supply expert advice to Industrial Banks* in order that they might be in a position to estimate the prospects of industrial projects seeking their assistance. The Industrial Banks would not themselves be able to enlist the services of experts and Government would do well to supply the need. Problems in connection with the constitution of Industrial Banks etc. will be discussed in the chapter on Banking.

Pending the establishment of such banks, the Industrial Commission suggest that the existing joint-stock banks should finance middle-class industrialists by advance of loans to them, subject to a guarantee by Government, after an investigation by the Director of Industries and his expert staff into the financial standing of the applicants and the prospects of their business. The recent State Aid to Industries Act of Madras may be mentioned in this connection. The necessity imposed on the recipients of the loans under it of maintaining elaborate accounts has, however, been found in practice to detract from the usefulness of the Act and an amendment for making it more elastic is contemplated.

The Industrial Commission recommend that Government should always provide direct financial aid in a few cases, such as public utility enterprises or those of national importance. Such assistance might take the form of a guarantee of dividends; loans of money; undertaking given by Government to purchase the output or state contributions to the share capital. All these forms of aid must be subject to suitable precautions in order to safeguard the financial interest of Government and to prevent the concessions from being exploited by foreign capitalists. It is not yet in evidence that Government have so far set earnestly about carrying out the more important recommendations regarding industrial finance made by the Industrial Commission. The financial stringency of recent years is probably one of the reasons for the indefinite postponement of vital proposals such as the establishment of Industrial Banks. A comprehensive banking survey of the whole country is being insistently urged upon Government and if it is undertaken an

opportunity would present itself for making a definite move towards organising an effective system of industrial finance.

§ 11. External capital in India.

The problem of external capital has come into prominence, especially since the recent adoption of the policy of protection. It is generally felt that the advantage of protection to the nation would be largely cancelled, if foreign capital and enterprise are allowed, without let or hindrance, to take shelter behind the tariff walls. Even under the regime of free trade a considerable number of companies with foreign capital had established themselves in the country. (See Table on next page) Indeed, as we have already seen, modern industrialism in India owes its inception to foreign capital. The question of the right policy to be adopted with reference to foreign capital has been examined recently both by the Fiscal Commission (1921-22) and the External Capital Committee which was appointed in 1924 in connection with the debates on the Steel Protection Bill in the Assembly.

§ 12. Amount of Foreign Capital: It is difficult to form an accurate estimate of the amount of external capital invested in India, but there is enough statistical material for a rough estimate. In the first place, *the returns of Joint-Stock Companies working in India but incorporated elsewhere* may be noticed. (See Table on next page).

Corresponding figures for Joint-Stock Companies registered in India (including Indian States) are as follows :—

1914-15		1925-26	
No.	Paid-up Capital.	No.	Paid-up Capital.
	Rs.		Rs.
2,545	80,78,81,572	5,311	277,29,85,686

Class of Companies.	1914		1925-26	
	No.	Paid-up capital	No.	Paid-up Capital
		£		£
Banking and Loan	13	24,551,108	30	71,014,704
Insurance	89	28,065,738	136	46,265,246
Navigation	12	15,001,685	18	31,064,327
Railways and Tramways	18	80,811,915	24	35,017,568
Transit and transport	...		11	9,003,990
Trading and Manufactur- ing Companies	113	114,254,333	303	289,707,531
Tea	166	17,573,284	161	22,310,929
Other Planting Companies	22	1,165,844	29	2,409,598
Coal Mining	6	139,134	7	222,962
Gold Mining	3	389,830	2	206,705
Other Mining and Quarry- ing Companies	13	5,030,999	21	19,756,792
Cotton Mills	3	400,000	7	418,725
Jute Mills	9	2,428,894	6	4,602,777
Cotton Ginning, Pressing, Baling etc.	1	100,000	2	150,000
Estate, Land and Building	...		2	242,222
Sugar (including Jaggery)	2	306,656	2	306,656
Other Companies	9	554,451	22	4,808,167
Total (British India)	479	290,773,871	783	536,598,905
Total (Indian States)	38	7,627,326	36	17,451,628
Grand Total	517	298,401,197	819	554,050,533

Several interesting facts are brought out by the above figures. In the first place, *the great predominance of foreign capital and enterprise in India is clearly revealed. The aggregate foreign capital is very much larger than the indigenous capital, and the fact that in the former case the number of companies is smaller shows the more substantial capital basis and economic power of the individual foreign concern. As against this, we see evidence of a definite tendency for the volume of Indian capital employed as well as the number of Indian concerns to increase at a more rapid pace than foreign capital and foreign concerns since 1914.*

Although the indications of the foregoing statistics are broadly reliable, they are subject to certain *reservations* which it is as well to mention here. (i) Firstly, only the paid-up capital of Joint-Stock Companies of both classes has been taken into consideration. To this must be added the *debenture capital* which in the case of companies registered outside India but working here has been estimated over a hundred million pounds. On the other hand, it must be remembered that in the case of many external companies especially, banking, insurance and navigation companies, not all the working capital shown in the returns is actually employed in India. (ii) Secondly, though the *registered domicile* of a company may be taken as a *rough index* of the origin of the capital, it must be remembered that some of the capital of foreign companies may be held by Indians and vice versa. As the External Capital Committee point out Indians hold a large and increasing share both in external companies and in companies with a rupee capital under non-Indian management, for example, in the Jute Mills. Similarly, as implied above, companies with a rupee capital, i. e., registered in India, may have a large number of foreign share-holders and the control may be in non-Indian hands. Cases in point are the Jute Mills of Calcutta, the Buckingham and Karnatak Cotton Mills, Madras, and the Cawnpore Woollen Mills. (3) Again, the above Tables take into account only the capital of Joint-Stock Companies and not the *capital of private firms*, foreign or Indian. (4) It is further necessary for purposes of forming a more accurate idea of the amount of foreign capital employed in India to take into consideration *sterling loans raised in England on Government account for Indian*

Railways, Irrigation Works etc. This amounted to £ 339.30 millions on the 31st March 1927 and may be regarded, along with the *London-encased Rupee Debt* of the Government of India, as held almost entirely by foreign investors.

Apart from any question of an accurate computation of the amount of foreign capital in India, there is no doubt about the broad fact with which we are mainly concerned here viz., that the total amount of foreign capital engaged in this country in some form or other is *very considerable*. Many of the large-scale business enterprises in India, such as Banks, Shipping Companies, Railways, Insurance Companies, Tea and Coffee Plantations, Mining Companies, Tanneries etc. are carried on with the help of foreign capital, though in recent years Indian capital is striking out new paths for itself and also increasing as regards the aggregate amount.*

§ 13. Foreign capital in India : Main issues :—The present predominance of foreign capital in India and the prospect of its increasing under a system of protective tariffs † raises the question how far it is desirable any longer to follow *the policy of the open door* with reference to it. In this connection, we must, at the outset, make a distinction between two different ways in which foreign capital may enter the country. It may enter as loan capital or as investment capital. It is generally agreed as regards the former that, while every endeavour should be made to mobilise the internal capital resources of the country, so long as indigenous capital is not forthcoming sufficiently rapidly and in adequate quantity, there is not only no objection to borrowing capital from abroad but it is positively advantageous to do so.

* Apart from the Cotton Mill Industry of Western India which is mostly financed by Indian capital and the Tata Steel and Iron Works and Tata Hydro-electric Works in the Western Ghats, Indian capital is making headway in the Jute Industry, Cement Industry, Banking, Steam Navigation etc. Government's own borrowings are also tending to rely in an increasing measure on the Indian Money Market.

† High import duties for revenue purposes which have characterised the War and post-War Indian finance have the same effect of holding out unusual attractions to foreign capital investment, unless their protective effect is balanced by corresponding excise duties

Other countries like Japan and the United States of America, although intensely nationalistic in feeling and policy, have encouraged the use of foreign capital in this form. Similarly, educated non-official Indian opinion has not opposed the use of foreign capital in this sense. Mr. Dutt, for instance, regarded the policy of raising capital abroad for financing State railways as sound and well advised. The foreign investor is in this case merely entitled to the stipulated rate of interest and acquires rights of control only in the event of default. Instances of this class of foreign loans are furnished by the various State and Municipal loans, bonds of Port authorities, bonds and debentures of private companies and bank loans.* As Dr. Slater puts it, "as no foreign control enters into the question, the main matters for consideration are.....(1) Can a new asset be created by means of an external loan which will yield a net annual return, directly or indirectly, to the people of India, exceeding the stipulated rate of interest? and (2) can the money be borrowed abroad on the whole to greater advantage than in India?"

If both of these questions are answered in the affirmative, obviously the use of external capital is advantageous." The External Capital Committee, however, introduce a reservation to the effect that in the case of Government and quasi-Government loans, the rate of interest should not be the sole consideration between an external and an internal loan. They suggest that apart from considerations of exchange, resort should be had to rupee loans as far as possible rather than to external loans, even although the rate of interest in the former may be somewhat more unfavourable, the idea being to foster habits of saving and investment and furnish first-class security in the form of Government scrip and well-secured bonds as cover for bank accommodation to industrial enterprises in India.†

Foreign capital, however, normally seeks entry into the country on a speculative and profit-sharing basis and involves foreign control and management. It is against this class of capital that objections are generally urged.

* See External Capital Committee's Report, p. 8

† *Ibid*, pp. 8-9

L. E...62

§ 14. **Objections to Foreign Capital:**—The principal points against foreign capital have been stated as follows:—* (1) The first obvious objection is that *the profits go out of the country*. To some, this objection appears so overwhelming that, rather than allow the natural resources of the country to be developed and exploited principally for the benefit of foreigners, they would like to see a complete ban on external capital even though this may result in an indefinite postponement of the industrial development of the country. This feeling is particularly strong with regard to “key industries” or industries important from the point of view of national defence, and those natural resources of the country such as minerals which once exhausted cannot be replaced. (2) The second objection is that *foreign firms prefer to choose as directors persons of their own nationality, a partiality which is extended to the selection of members of their superior staff*, so that Indians have no reasonable chance of rising to positions of responsibility and power. They are also *unwilling to train up Indians as apprentices*, so that one of the main advantages claimed for foreign capital is usually missed. (3) Lastly, there is the *political objection* against foreign capital, viz., that it gives rise to vested interests which are usually *anatomistic to the political and economic aspirations of the country*. Foreign capital may in course of time be compelled, in sheer self-defence and for purely economic reasons, to identify itself more and more with the Indian standpoint. But this is a symptom which it has not developed as yet to any appreciable extent.

§ 15 **Uses and advantages of Foreign Capital:**—There are, however, several grounds on which, in spite of the disadvantages noted above, it may on the whole be necessary and desirable to welcome foreign capital subject to certain reservations. (1) *One of the advantages of foreign capital is that with its help the process of industrialisation and consequently of the enrichment of the country is expedited*. The country gains from the beginning, because the industries, although dependent on external capital, cause an increase in the national wealth at least in the form of the

* See Fiscal Commissions' Report, para 290 and Minute of Dissent, paras 54-52. See also External Capital Committee's Report, para 17.

wages paid to the labour that is employed. There is no general rule governing the proportion which profits bear to wages, but in many cases wages constitute a considerable item in the gross earnings of an industrial enterprise. However that may be, if the alternative lies between no industrial development and industrial development with the help of foreign capital, it is clear that the latter is to be preferred from the purely economic point of view. No doubt, the country would benefit most if profits as well as wages remained in the country, and it is of the utmost importance that indigenous enterprise should come forward as quickly as possible to undertake the task of the industrial development of the country and everything should be done to bring about such a consummation. But in the meanwhile, so long as the people of the country are not ready to take up the work, it may be advantageous to allow foreign capitalists to do so. The wages, whether they bear a small or a large proportion to the gross earnings, undoubtedly constitute a net gain to the country.* But the more important gain, apart from that which comes by way of an immediate increase of national wealth to the extent of the wages earned, is that the foreign capitalist, as the Fiscal Commission point out, imports into the country the *technical knowledge and the organisation* which are needed to give an impetus to industrial development. But this advantage can only be reaped fully if facilities are provided by the foreign firms to train the people of the country in matters of industrial organisation and technique. In this connection, we feel bound to observe that, in spite of the fact that European capital has for a long time been active in the field of industry in India, its presence has not resulted in any appreciable advantage of the character described above. This shows that merely allowing unrestricted entry to foreign capital is not automatically followed by the advantages claimed for it. It seems necessary to impose such conditions on foreign companies as are calculated to hasten the industrial education of the country. No useful purpose is served by denying that Indians are at present lacking in the qualities of industrial leadership and industrial knowledge. But they are capable of learning the

* See Morison : *Economic Transition in India*, p. 220.

lessons which the West can teach them in these respects, provided they get proper opportunities and facilities for doing so. And if they fail to get the necessary initiation into up-to-date methods and new ideas at the hands of foreign industrialists, the main object of allowing foreign capital to establish industries in the country will be defeated. While all this indicates the necessity of taking special steps in order to derive the fullest benefit from foreign enterprise, it does not deny its utility. As a matter of fact, under certain circumstances, foreign capital affords the only solution of the problem of economic development. This is why many countries, far from having a prejudice against it find it profitable to go out of their way to take special measures for attracting it. This is also the reason why protection is sometimes supported on the ground that it induces foreign capital to seek investment in the country erecting tariff walls.

Another advantage claimed for foreign capital is that it *bears the initial cost of development* and smooths the path of indigenous enterprise. This leads us to remark that, in considering the huge profits made by foreign capitalists in India (estimated at £ 16 millions per annum),* we must allow for the initial losses sustained by them. At the same time, it should be borne in mind that it is a sign of weakness if a country always depends upon foreigners for taking the risks attendant upon industrial enterprise.

§ 16. Proposed restrictions on external capital:--On a consideration of the advantages and disadvantages of foreign capital, we come to the conclusion that, although we must not receive it too freely and with an excess of compliment, it has an important role still to perform in the industrial development of the country, provided its operations are brought under suitable regulation and it is subjected to certain restrictions. The restrictions have to be devised so as to reconcile two conflicting sets of considerations. On the one hand, foreign capital must be attracted in just the required quantities and of just the required kind. If the restrictions are too rigorous, external capital is likely to be scared away to the detriment of the country. On the other hand, the total absence of restrictions or excessive

* See External Capital Committee's Report, p. 4.

any in imposing them carries with it the danger of foreign capital occupying the whole field of remunerative industry about any corresponding advantage to the country. Before discussing the manner of imposing restrictions on foreign capital to harmonise these opposing considerations, we shall first refer to the kind of restrictions proposed, which are as follows—

(i) *Foreign companies should be incorporated and registered in India with a rupee capital so as to offer facilities for investment to Indians and to identify the management with Indian national interests.* The objection that this restriction is likely to be evaded by the formation of private instead of joint-stock companies is met by pointing out that the large capital necessary for modern industrial enterprises cannot ordinarily be raised by private firms and that, in any case, if such an evasion is seen to occur on a large scale, special legislation might be passed to prevent it. (ii) *Secondly, a proportion of the shares of such companies should be reserved to Indian investors in order to ensure sufficient Indian control on the management.* A less extreme variant of this is that *this proportion should be reserved to Indian subscribers in all new companies for a definite period of time.* It has been objected against this provision that it would be utterly useless unless restrictions are placed on the free transferability of shares subscribed to initially by Indians, but if the free transferability is allowed, the Indian shareholder would be penalised as the result of a restricted market for his shares and the consequent loss in their value. On the other hand, the reservation of a certain proportion of the shares to Indians would so far limit the amount of capital in the industry, and by lessening competition would increase the yield to it, but this in its turn means that the capitalists would gain at the expense of the consumer. Lastly, it is pointed out that it would be practically impossible to prevent the evasion of all such restrictions.*

(iii) Thirdly, it is proposed that *a certain percentage of the directors should be Indians, preferably chosen by the Indian shareholders.* The objection that this restriction savours of a narrow racial communalism, which is, moreover, fatal to busi-

nesslike and efficient management, has been met by the counter argument that the very idea of imposing certain disabilities on foreign capital because it is foreign, is a kind of communalism which, on other grounds, is nevertheless regarded as necessary. Even England has not been free from the taint of communalism meaning thereby a certain amount of discrimination against the foreigner. In illustration of this, Pandit Malaviya points to the provision of the English Overseas (Credit and Insurance) Act, 1920, restricting the grant of credit only to such firms as possess a predominantly English character. Similarly in India, even under the free trade regime Government had already accepted the necessity of such restrictions whenever concessions were granted to private companies.

(iv) Further, it is proposed that *all companies, Indian and non-Indian, should provide facilities for the training of Indian apprentices* and that penal taxation should be imposed for non-compliance. We have already seen that the purely economic motive of the cheapness of Indian skilled labour cannot, under present conditions, be relied upon to ensure the entertainment of a sufficient number of Indian apprentices by foreign companies without the compelling force of law.

§ 17. Manner of imposing restrictions :—It is more or less generally agreed that some such restrictions on foreign capital are necessary for minimising its disadvantages and maximising the advantages. Such restrictions have actually been legalised in the Indian Steel Industry Protection Act of 1924. There is, however, a difference of opinion as to the cases to which they should be applied. The Majority Reports of the Fiscal Commission and the External Capital Committee,* for example, would prefer to confine these restrictions only when a definite concession or pecuniary assistance such as a bounty has been granted by the Government to companies, their general

* Pandit Malaviya in a Note of Dissent to the Report does not agree with his colleagues that restrictive measures should be confined only to concerns receiving definite concessions and puts forward a strong plea for adopting methods to ensure that in every public company which may be incorporated in India in the future, a certain proportion of the capital should be Indian.

to the wholesale imposition of these conditions under circumstances being that they would be too onerous and therefore, be evaded or, if not capable of being evaded, would drive away foreign capital almost altogether. The Minority of the Fiscal Commission, on the other hand, argue that even in itself constitutes an important concession and by no distinction can be made between favouring an increase by means of definite concessions like bounties and fitting it to the benefit of a general system of protection. They opine that the restrictions proposed above should be applied in all cases whether particular concessions are granted

The general conclusion that emerges from the above discussion is that, in the first place, *external capital is in some measure necessary* under the present circumstances in India for the purpose of hastening industrialisation and shortening the period of consumer's sacrifice, which will continue so long as protective tariffs are maintained, and for enriching the country by providing it with the modern equipment of industry. In the second place, however, the inflow of external capital must be controlled in order to fulfil the objects specified above. How exactly and under what circumstances this control should be exercised is a question of more of detail than of principle. The difference of opinion between the Majority and Minority Reports of the Fiscal Commission to which we have referred, arises from the fact that the Majority have a very limited faith in the efficacy and wisdom of the proposed restrictions; whereas the Minority entertain a strong bias in favour of them. But there is a fundamental difference between them as regards the national ends to be achieved by the regulation of foreign capital.

How far the methods of regulation suggested will be effective for the purpose of attaining the aims kept in view, can only be decided by a process of trial and error. It appears to us that the injurious effects of possibly too stringent a regulation are expected by the Majority Report. If a particular type of control is found in practice to be injurious, it is always possible to withdraw or modify a corrective to suit the circumstances of each case. The fact is that the various restrictions discussed above carry certain

disadvantages with them and are liable to be circumvented by kinds of subterfuges is of the nature of a platitude and does not take us very far. We do not think that irreparable injury will result from beginning with comparatively stringent regulations on the lines recommended by the Minority Report; if they are found unsuitable, they could be changed and moderated as may be demanded by circumstances. We do not believe that capital, that may be scared away as a result of restrictions which prove by experiment to be too severe, cannot be coaxed back again by relaxing them if and as necessary. A certain initial bias, however, in favour of restrictions on foreign capital would be in consonance with non-official Indian opinion and would be interpreted as a friendly gesture on the part of Government and a sign that they are prepared whole-heartedly to pursue a policy of encouragement and support to Indian industries.

One of the points urged in favour of exercising great circumspection in the matter of controlling the inflow of external capital is that foreign capital, being required for the post-war reconstruction in Europe, is no longer as easily available as before the War. As against this, however, it may be argued that the present difficulty of obtaining external capital is balanced by the recent tendency on the part of Indian capital to show an increasing readiness to respond to the efforts made for attracting it into remunerative investment, a tendency which, it is believed, will be further strengthened by the growing pace of industrialisation under the stimulus of a policy of protection. The amount of capital in India that is at present lying infructuous is so great that, if proper means are found for attracting it, India will be in a position to forego the use of foreign capital altogether. Not only this, but there is justification, according to Sir Basil Blackett for the optimistic view that, India will before long be in a position not only to dispense with foreign capital but to lend to other countries a considerable surplus that will be left after fully satisfying her internal needs.

§ 18. Need for developing internal capital resources:—It is obvious that the greatest advantage would be realised, when the country is in a position to satisfy her requirements for new capital almost entirely from internal rather than from external

es and, as the External Capital Committee remark, "The solution of the problem of external capital lies in the development of India's own capital resources." In order to draw out *vast store of dormant capital* "in existence in India," bank-facilities must be increased and extended"* To this end, the Committee suggest a co-ordinated survey of the whole field of banking in India to be followed by a detailed examination by an Expert Committee on the lines along which progress should be made. The important subject of the development and reorganisation of Indian banking will be pursued further in a separate chapter on Banking later on.

The replacement of foreign by indigenous capital implies that industries should not only be financed by Indians but also owned and managed by Indians. This latter point, however, has already been dealt with earlier in the chapter.
